

NOVEMBER 2021

Financing the Fight

History and Assessment of DoD Budget Execution Processes

Author
Robert F. Hale

A Report of the
CSIS Defense Budget Analysis Program

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Acknowledgments

The author wishes to thank numerous people who provided helpful comments and information. Particular thanks to Mark Easton (former deputy chief financial officer at the Department of Defense) and to four current Defense Finance Accounting Service employees including Director Audrey Davis, Aaron Gillison, Anthony Hullinger, and Rosalie Tinsley. Thanks also to Steve Burnkrant, Seamus Daniels, Gus Gustafson, Todd Harrison, Peter Levine, Anne McAndrew, Michael O’Hanlon, Roberto Rodriguez, and Robert Speer. The author appreciates the willingness of 10 retired military commanders, all senior flag officers, to be interviewed about defense financial management. The author, of course, assumes full responsibility for all the conclusions and for any errors or omissions.

This report is made possible by general support to CSIS. No direct sponsorship contributed to this report.

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Summary

The Department of Defense (DoD) has a process for utilizing approved budgets, known as budget execution, that seeks to achieve three goals: meeting national security needs effectively, complying with relevant laws and regulations, and pursuing efficiencies in the DoD budget in order to hold down costs. The process has evolved significantly over the years. Until about 1900, DoD and other federal agencies enjoyed a great deal of flexibility during budget execution, sometimes ignoring congressional restrictions or using funds appropriated for one purpose to pursue another without congressional approval. In response, controls began to be tightened.

- First, Congress passed legislation tightening controls. In 1905, Congress passed the Antideficiency Act, imposing penalties on those who used funds in ways that Congress had not approved and creating the apportionment process, which permits restrictions to be placed on the timing and nature of funding. In 1921, Congress passed the Budget and Accounting Act, which among other changes created the General Accounting Office (GAO), an agency that reported to Congress with a mission to oversee the use of federal funds.
- The executive branch and Congress also tightened controls through policy changes. In 1933, President Franklin D. Roosevelt transferred authority to apportion funds from the agencies to the Bureau of the Budget, thus increasing presidential oversight over agency funding. During the latter half of the twentieth century, Congress significantly restricted DoD's authority to move money from lower to higher-priority projects using reprogramming actions and also greatly tightened controls over DoD's ability to repurpose funds that turned out not to be needed for a project. Starting around 1993, DoD began making major changes in its accounting practices, including prevalidation procedures that required the department to check for availability of funds before creating obligations.
- Perhaps the most far-reaching growth in restrictions came from Congress, which gradually and dramatically increased the limits it places on DoD. The size of legislative texts provides one measure of these increases. Between Fiscal Year (FY) 1975 and FY 2020, for example, the number of pages in the legislation authorizing funding for DoD increased a hundredfold.

Even in the face of growing restrictions, DoD financial managers sought to streamline budget execution processes to save money, with considerable success. In the 1990s, DoD began requiring travelers to use commercial credit cards to pay most government travel expenses, which reduced the high cost of providing cash advances. DoD also permitted some of its personnel to pay for small purchases using commercial credit cards, which permitted companies specializing in credit cards to handle much of the accounting for DoD purchases that are small but numerous. Both of these initiatives encountered serious start-up problems but eventually matured and saved DoD hundreds of millions of dollars a year. The most far-reaching financial streamlining initiative started in 1991 when DoD began consolidating many of its finance and accounting functions into one DoD-wide organization known as the Defense Finance and Accounting Service (DFAS). Despite significant start-

up problems, this consolidation now saves DoD about \$1.5 billion a year, ranking it among the larger cost savings achieved through reforms of support operations.

Unlike almost all other federal financial managers, DoD managers must execute budgets during wars, and they have struggled to carry out this mission. Payroll and accounting problems plagued wartime budget execution starting with the American Revolution, but improvements in computer and communications technology eventually resolved many of these problems. In recent decades, financial managers also had to execute budgets not only during wars but also under other difficult circumstances, such as late appropriations (11 of the 12 budgets enacted between FY 2010 and FY 2021 were late), sequestration (including a large automatic budget cut in FY 2013), and government shutdowns (DoD experienced a 16-day shutdown in FY 2014).

The performance of DoD's budget execution processes can be assessed in terms of the three key goals they should meet. Budget execution is weakest on the first of the goals, which seeks greater efficiency in the DoD budget. Roadblocks stand in the way of efficiency, especially DoD's focus on accomplishing its national security mission, which often overwhelms efforts to save money. DoD does reasonably well on the second goal, complying with financial laws and regulations. For example, the department's violations of the key Antideficiency Act constitute a tiny fraction of its budget, and DoD violations fall at or below levels in other federal agencies when measured relative to agency size. But DoD does need to achieve auditable financial statements to comply with laws and congressional guidance. DoD financial management gets its best marks for helping meet national security objectives—the third and arguably most important goal. A survey of 10 former military commanders clearly bears this out, as does the author's experience. Overall, both history and the author's experience suggest that budget execution performs many tasks well, and DoD should maintain and nurture these successes.

However, budget execution would benefit from key improvements, especially the first two listed below:

- **Effective budget execution depends on its ability to move or reprogram money from lower to higher priorities during budget execution**, but the trust that sustains the reprogramming process was damaged in FY 2019 and FY 2020 when DoD moved some funds without congressional approval. The Pentagon needs to work with Congress to bolster support for this critical process.
- **Congress should provide DoD with selected added flexibility to execute budgets, especially for software and high-tech initiatives that must adapt to changing technology.** Selectively extending the recently-approved pilot software program (which provides funds that can be used as needed for research, procurement, and sustainment) to other high-tech projects would help, as would limited portfolio budgeting (which would permit DoD to move funds within the portfolio to meet changing needs).
- **DoD should make better use of cost information to help identify efficiencies** by, among other approaches, harnessing and improving the power of tools such as DoD's ADVANA, a

computer system that identifies large amounts of data and makes that data more understandable and useful.

- **Congress should allow DoD to carry over a small portion of its operating appropriations into the second year** (perhaps 5 to 10 percent) in order to limit the year-end spending spree and to increase the chances that operating funds support the department's highest-priority needs.
- **Congress and the administration should work together to delay the beginning and end of the fiscal year**, taking advantage of action-forcing events such as the end of a Congress and the December holiday recess to increase the chances for on-time budgets. However, new start and end dates must be chosen to avoid undue stress on those who manage DoD's budgets.
- **Congress needs to reduce the amount of budget guidance provided each year to DoD**, taking into account the effects that the current level of guidance has on DoD's support costs and on the speed and flexibility of budget execution.

1 | Introduction and Overview of the Budget Execution Process

After Congress has enacted appropriations legislation and the president signs it, funds are used to meet national security needs through processes known as budget execution. Budget execution involves allocating approved funds, monitoring their use, and supporting financial reporting. In contrast to budget formulation, which concentrates on policy choices and is governed mostly by executive branch regulations, budget execution is often governed by laws and regulations and must focus as much on compliance with those laws and regulations as on policy. Also, despite its obvious importance, budget execution receives much less attention—both from many DoD leaders and from academics—than its more attractive counterpart, budget formulation, which is unfortunate. As one budget scholar put it, inattention to budget execution is like going to a horse race and watching the horses prance about and enter the starting gates, then leaving before the race has been run.¹

Key Steps in DoD Budget Execution Processes

- **Appropriation:** Congress and president make funds available
- **Apportionment:** Funds made available for certain periods of time, sometimes with restrictions
- **Funds Distribution:** Funds allocated to organizations for execution
- **Obligation:** Legal agreements that can eventually generate disbursements
- **Reprogramming:** Moving funds from lower to higher priorities during execution
- **Disbursement:** Paying bills after provision of services or completion of employment
- **Evaluation and Audit:** Tracking progress to plans and financial statement audits

Most people, even including some DoD experts, do not fully understand the sometimes esoteric processes associated with budget execution. To help, this paper begins by introducing the key steps under the current version of the DoD budget execution process. The accompanying text box briefly summarizes those steps, which are described below in more detail but still in highly simplified terms. Hopefully, this introduction will help readers understand the terms used in the remainder of the paper.

- **Appropriation of Funds:** Budget execution begins when Congress passes and the president signs appropriations legislation making obligating authority—that is, the authority to enter into contracts or pay personnel—available to DoD. (Throughout this paper, the term “funding” is sometimes used to describe obligating authority.) Appropriations occur each year, ideally by the beginning of the fiscal year. Appropriation legislation sets funding levels for DoD programs, projects, and activities. Appropriation legislation also imposes many restrictions on how DoD

¹ Louis Fisher, *Presidential Spending Power* (Princeton: Princeton University Press, 1975), 3–4.

obligates funds. Authorizing legislation—for DoD, the legislation passed by the House and Senate Armed Services Committees—also plays a role in this step. Authorization legislation does not make funds available for obligation but can establish policies and impose restrictions on DoD’s authority to use appropriated funds.

- **Apportionment:** During this step, the Office of Management and Budget makes funds available for obligation at various periods of the fiscal year, usually for each quarter. Apportionment seeks to ensure that DoD does not obligate funds so quickly that it runs out of money. Apportionments also sometimes impose restrictions on obligations.
- **Funds Distribution:** The DoD comptroller distributes apportioned obligating authority to the military services and agencies, which in turn suballocate that authority to the organizations that will actually use the funds. Funds distribution documents represent legally binding allocations of obligating authority and may include restrictions on how those funds can be used.
- **Obligation of Funds:** Obligations represent legally binding agreements that can eventually generate disbursement of funds from the U.S. Treasury. Once contracts with private companies are signed, and as DoD employees are employed, funds must be obligated to pay for personnel, goods, and services. An obligation requires the government to pay once employees have performed their duties or contractors have provided goods and services that meet contractual requirements.
- **Reprogramming Actions:** Because the process of budget formulation and budget execution can take years to complete, DoD needs the ability to meet changed requirements by moving funding from lower- to higher-priority programs during budget execution. Reprogramming actions, which often require congressional approval, provide DoD with limited ability to reduce funds for some programs and move an equal amount to other programs. Typically, DoD conducts one large reprogramming action each fiscal year, called an omnibus reprogramming, with formulation starting after the middle of the fiscal year and implementation extending into the summer of that year. Smaller reprogramming actions can occur throughout the budget execution period.
- **Disbursement of Funds:** Once DoD has obligated funds on a contract and the contractor has delivered goods or services acceptable to the government, DoD directs the Department of the Treasury to make payments by disbursing funds. (In this paper, disbursement is sometimes referred to as “spending”; in other texts, it is sometimes called outlays.) Before making a payment, DoD requires an invoice from the contractor, verification that obligated funds are available to cover the disbursement, and a document stating that the correct goods or services have been received. Payments to employees also generate disbursements.
- **Evaluation and Audit:** Throughout the budget execution year, commanders and managers evaluate how closely execution tracks to plans and make adjustments as needed. After the execution year ends, DoD completes an audit of its financial statements. For selected programs, DoD uses program audits and other techniques to evaluate how well funds have been used to meet defense needs. Evaluation and audit are beyond the scope of this paper but remain on this list because they are sometimes considered to be part of the budget execution process.

This paper turns first to the history of budget execution, with an emphasis on events that have shaped today's processes. The paper then describes efforts to streamline budget execution to make the process itself more efficient. Next, it deals with budget execution during extraordinary periods, including wars and disruptive events such as government shutdowns. Finally, the paper identifies the strengths and shortcomings of today's budget execution system, including recommended improvements, before concluding with the author's overall assessment of the current process.

2 | History of the Budget Execution Process

During the early history of budget execution, defined as the years up to 1900, budget execution policies provided the executive branch considerable flexibility. Gradually, though, controls tightened, both because of legislative and policy changes and because of increases in congressionally imposed guidance and restrictions.

Early Developments

In 1789, the U.S. War Department received its first appropriation in the amount of \$137,000 (about \$6 million in FY 2020 dollars).² The Department of the Treasury supervised budgets during those early days, but some presidents attended to budgets personally. Both Presidents John Quincy Adams (who served as president from 1825 to 1829) and James Polk (1845 to 1849) personally oversaw agency budget estimates. By contrast, there is no solid evidence that President Abraham Lincoln (1861 to 1865) reviewed budget estimates, despite their importance during the Civil War.³

Presidents who did pay close attention to defense and other agency budgets found that they enjoyed considerable financial flexibility during the early history of the United States. Congress made that first appropriation of \$137,000 to the War Department as a lump sum, permitting the executive branch to make all the decisions about how to use the funds. Subsequent political leaders debated the merits of providing budgets in a lump sum or by line item, but lump-sum appropriations sometimes continued, especially during wars. Even when operating under line-item budgets, executive branch leaders during these early years could move money from accounts they felt had too much funding into those that they thought needed additional funding, sometimes without congressional approval. Congress sought to place limits on these transfers, but they continued. At times, the executive branch also had access to funds for extended periods, sometimes for more than two years. Lengthy availability of funds would seem to violate Article I, Section 8 of the Constitution, which states that appropriations to raise and support armies shall not be made for more than two years. However, a 1904 legal ruling declared that the two-year limit applied to funds to raise and support an army, but not to equip it.⁴

² Adjustments to FY 2020 dollars are made using data from the National Defense Budget Estimates for FY 2020. Office of The Under Secretary of Defense (Comptroller), *National Defense Budget Estimates For FY 2020* (Washington, DC: DoD, 2019), https://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2020/FY20_Green_Book.pdf. Prior to 1948, calculations of FY 2020 use inflation estimates from the Department of Labor's Bureau of Labor Statistics which are based on estimates from Oregon State University. "Inflation Calculator," Official Data Foundation, <https://www.in2013dollars.com/>.

³ Fisher, *Presidential Spending Power*, 15–19.

⁴ *Ibid.*, 60–61, 99–101, 123, 127.

Under certain circumstances, defense organizations even had authority to obligate funds without prior congressional approval. Under a law dating back to 1799, the secretary of war could obligate funds for items such as clothing, food for troops, and forage for horses. These uses led to the name Feed and Forage Act. Obligations under the act can only be made for the current year, but prior congressional approval is not required. After obligating the funds, DoD must ask Congress to

The flexibilities available to the executive branch led to abuses, at least in the view of Congress.

appropriate money to cover disbursements resulting from the obligations. But by that time, Congress has little choice but to provide money to liquidate a legally valid obligation. Congress modified the Feed and Forage

Act in succeeding years, including a 1966 amendment requiring that DoD report any use of the technique. But the basic law remains on the books to this day and is used periodically.⁵ Data from the DoD comptroller indicates the Pentagon invoked the Feed and Forage Act 11 times between FY 1962 and FY 2001. During this period, DoD used the act to obligate about \$19 billion in FY 2020 dollars, including large obligations during the Vietnam War, the Gulf War, and the Middle East oil crisis in 1980.⁶

The flexibilities available to the executive branch led to abuses, at least in the view of Congress. In 1807, a member of Congress complained that the executive branch was making purchases on credit in excess of appropriated funds, figuring that Congress would be forced to pay the bill. In 1819, President James Monroe (who served from 1817 to 1825) used unspent funds to buy Navy vessels needed to suppress the slave trade and punish acts of piracy. Congress protested but Monroe brushed them off based on a technicality.⁷ In some years, agencies spent money at rates that would cause their agency to run out of money and then threatened to shut the agency down if Congress did not provide more funding. Other agencies asked lower-level employees to “volunteer” for unpaid overtime, a practice that sometimes led these workers to demand extra pay.⁸

Congress tried to rein in executive authority. Way back in 1809, Congress enacted the purpose statute, requiring that “appropriations shall be applied only to the objects for which the appropriations were made except as otherwise provided by law.”⁹ But the purpose statute did not halt the abuses. Then in the late 1800s, Congress began taking stronger action to restrict some actions it viewed as abusive

⁵ Ibid., 239–240, 244.

⁶ Amy Belasco, Steven Daggett, and Pat Towell, *How Long Can the Defense Department Finance FY2008 Operations in Advance of Supplemental Appropriations?*, CRS Report No. RL34275 (Washington, DC: Congressional Research Service, December 2007), 10, <https://fas.org/sgp/crs/natsec/RL34275.pdf>.

⁷ Fisher, *Presidential Spending Power*, 124.

⁸ Raymond Natter, “Outlawing Volunteers: Congress vs. the President,” The Ultimate History Project, n.d., <http://ultimatehistoryproject.com/anti-deficiency-act-history-behind-the-governement-shutdown.html>.

⁹ Government Accountability Office, “Availability of Appropriations: Purpose,” in *Principles of Federal Appropriations Law*, GAO-17-797SP (Washington, DC: 2017 revision), 3–9, <https://www.gao.gov/assets/gao-17-797sp.pdf>.

practices, including language added to an 1884 appropriations bill that prohibited government agencies from accepting voluntary services.

[E]ven by the end of the nineteenth century, Congress had not passed comprehensive legislation to enforce its constitutional control over spending.

Article I, Section 9 of the U.S. Constitution states that “No Money shall be drawn from the Treasury, but in Consequence of Appropriations made by law.”¹⁰ It is remarkable that, even by the end of the nineteenth century, Congress had not passed

comprehensive legislation to enforce its constitutional control over spending. But Congress soon began rectifying this oversight.

Tightening Controls through Legislation

During the early part of the twentieth century, Congress enacted two laws—one that immediately tightened controls over funding and another creating new organizations that would gradually impose tighter controls.

Antideficiency Act

In 1905, Congress passed the Antideficiency Act (ADA), which codified several major financial restrictions on federal employee actions, including provisions mandating that:

- No funds in excess of those in appropriations and accompanying apportionments may be obligated;
- Funds may not be obligated prior to being appropriated; and
- Voluntary services may not be accepted unless specifically authorized.

Violations of the ADA must be reported to the president and Congress. Knowing and willful violations can result in fines of up to \$5,000 or imprisonment for up to two years or both, making the ADA the only fiscal statute that imposes both criminal and administrative penalties. There is, however, no evidence of any criminal prosecutions or convictions under the law. Most ADA violations result in administrative penalties that can range from termination of employment to letters of caution or reprimand, but the most serious penalties are rarely imposed. In the entire decade

Tightening Controls through Legislation

- **Antideficiency Act of 1905**
- **Budget and Accounting Act of 1921**
- **Other laws**

¹⁰ National Archives, “The Constitution of the United States: a Transcription,” <https://www.archives.gov/founding-docs/constitution-transcript>.

prior to 2016, for example, agencies removed only eight federal employees from their positions due to ADA violations. In the author's experience, sanctions usually consist of lesser penalties such as letters of reprimand. However, for a professional and proud financial manager, even a lesser penalty represents a serious rebuke.

The Antideficiency Act makes a clear statement about controlling federal funding and, because it carries penalties, acts as a significant deterrent to improper financial activities.¹¹ While serving as DoD comptroller, the author had to sign letters to the president and senior congressional leaders acknowledging DoD ADA violations. Even though he knew these senior leaders would rarely if ever read the letters, signing them to the president emphasized the importance of the law for him. The author has observed that DoD financial managers also take this law seriously, often regarding ADA violations as the “felonies” of financial management.

Also in 1905, Congress passed an important amendment to the ADA specifying that funds cannot be spent in advance of an apportionment. Apportionment is an administrative action that limits the amount of funds available for obligation during a certain time period and is designed to prevent agencies from obligating funds so quickly that they run out and cannot continue their mission, a problem that had raised concerns in the nineteenth century. Apportionment can also restrict the use of funds. However, the 1905 amendment permitted agency heads to waive the apportionment requirement, which they did frequently and for routine purposes. In 1906, Congress rewrote the apportionment provision to eliminate waivers except in emergencies.¹² But the apportionment process still lacked significant enforcement “teeth,” a situation that continued until the 1930s.

In 1950, Congress made yet another important change to the ADA to permit obligation of funds without an appropriation in emergencies involving the safety of human life and the protection of property.¹³ This exemption permits portions of DoD and other federal agencies to conduct limited operations during a government shutdown caused by the absence of an appropriation.

Along with the purpose statute noted above, the ADA created what has been called the golden rules of federal budget execution. The three golden rules require that spending be appropriate in terms of *time* (that is, money must remain available at the time of obligation, which is also known as the bona fide needs rule), *purpose* (spending must be for the purposes established in the appropriation), and *amount* (spending must not exceed the amount appropriated).¹⁴ The highly complex specifics surrounding these golden rules, particularly the purpose rule, go well beyond the scope of this paper and sometimes beyond the knowledge of defense financial managers. Indeed, during his stints as comptroller for the Air Force and then for all of DoD, the author learned always to have his fiscal

¹¹ Gordon Gray, “The Antideficiency Act: A Primer,” American Action Forum, August 3, 2016, <https://www.americanactionforum.org/research/antideficiency-act-primer>.

¹² Fisher, *Presidential Spending Power*, 234.

¹³ *Ibid.*, 235.

¹⁴ Michael E. Barnicle, “Golden Rules of Fiscal Law: Purpose, Time & Amount,” Duane Morris Government Contracts Practice Overview, March 6, 2015, <https://blogs.duanemorris.com/governmentcontractslaw/2015/03/06/golden-rules-of-fiscal-law-purpose-time-amount>.

lawyers at his side during substantive discussions involving these rules. All DoD financial leaders should heed this lesson.

Another important lesson involves the adjudication of potential ADA violations. These violations can involve valued employees who made honest errors while handling complex financial transactions. Because they raise difficult personnel issues, commanders and managers sometimes put off assembling evidence and reaching a conclusion about whether an ADA violation occurred. If a violation occurred, commanders sometimes then put off identifying those responsible and imposing appropriate discipline. These delays can lead to large backlogs of old cases, including many so old that those involved have left government or retired. Personnel no longer in government usually cannot be disciplined, which reduces the deterrent value of the act. As of end of FY 1995, not long after the author took over as Air Force comptroller in March 1994, the service had 55 open cases involving potential ADA violations, some of which had occurred many years earlier. After working with commanders and managers and insisting on action, the backlog declined to about 11 cases by the end of FY 2000. Financial leaders need to be sure the process for adjudicating violations works quickly enough to ensure the ADA deters inappropriate financial actions.

Budget and Accounting Act

In early 1921, after a couple of years of vigorous debate, Congress passed the Budget and Accounting Act, which made significant organizational changes that had long-term effects on budget execution at DoD and other federal agencies. The act also made important changes in budget formulation that are discussed in another of the author's papers on DoD financial management.¹⁵

The Budget and Accounting Act of 1921 established the Bureau of the Budget, which began its life as part of the Department of the Treasury but reported directly to the president starting in 1939. In 1933, a policy change discussed below put the bureau in charge of apportionments. In 1970, the bureau reorganized, changed its name to the Office of Management and Budget (OMB), and began taking on more management responsibilities related to federal activities, including financial management.¹⁶ Today, because of its size and well-trained staff, DoD handles most financial management activities on its own. But OMB has responsibility for several activities that affect DoD budget execution, often operating through its Office of Federal Financial Management. These efforts include coordinating the activities of agency chief financial officers, seeking reductions in improper payments, and guiding and monitoring the implementation of government-wide financial laws. In the author's experience, OMB plays a particularly important role in coordinating agency efforts during disruptive periods, such as government shutdowns.

The 1921 law also established the General Accounting Office (GAO), rendering it independent of the federal agencies by having it report directly to Congress. The law tasked the new organization with

¹⁵ Robert F. Hale, *Financing the Fight: A History and Assessment of Department of Defense Budget Formulation Processes* (Washington, DC: Brookings Institution, April 2021), 5, https://www.brookings.edu/wp-content/uploads/2021/04/FP_20210429_financing_the_fight_hale.pdf.

¹⁶ Fisher, *Presidential Spending Power*, 35, 40, 46–47.

investigating all matters related to public funds or any issues referred to it by the House or Senate. GAO also had to establish the forms and procedures to be used for funds accounting and resolve all claims levied by the U.S. government as well as claims levied against the government.¹⁷ The Budget and Accounting Procedures Act of 1950 further specified GAO's audit responsibilities and required it to establish principles and standards for agency accounting.¹⁸

During its early years, GAO focused mostly on audits of federal accounting records, especially vouchers. Legions of audit clerks labored in the great hall of the Pension Building in Washington, D.C., GAO's home from 1926 to 1951. Business boomed during World War II, and by 1945, GAO had more than 14,000 employees—almost two-thirds of them women. GAO declined sharply in size after the war and, especially starting in the 1950s, the agency began focusing more on economy and efficiency audits, particularly audits involving defense contracts. The office's bluntly worded audits often caught the attention of DoD, its contractors, and Congress. In more recent decades, GAO has continued to broaden its audit efforts, leading the organization to change its name in 2004 to the Government Accountability Office—a change designed to emphasize performance audits and its watchdog role.¹⁹ Today, GAO still performs many defense audits.

In the author's view, GAO's formal audits would have a greater effect on DoD policy if it did a better job of mixing praise for good work with its criticisms and recommendations. Many times, GAO audit titles are harshly critical and the text focuses almost entirely on problems. The time GAO requires to prepare an audit also sometimes leads to findings that have already been identified and fixed. These points notwithstanding, there is no doubt that GAO plays a significant and important role in DoD budget execution, especially during congressional reviews of that process.

Wilfred McNeil, DoD's first comptroller, brought about another legal change that significantly affected financial controls in DoD. McNeil began his DoD career as a special assistant for fiscal affairs to the first secretary of defense, James Forrestal. He started serving as DoD's comptroller in 1949 after an amendment to the National Security Act of 1947 established the comptroller position. McNeil built great credibility with Congress, and as part of the 1949 amendment, he helped persuade Congress to permit the secretary of defense to approve schedules of obligations and rates of expenditures, an authority previously reserved for the military services. The services strongly resented this change because it effectively concentrated important aspects of financial decisionmaking in the hands of the secretary. Indeed, a 1976 DoD study concluded that all subsequent extensions of the secretary's

¹⁷ *Budget and Accounting Act*, Public Law 13-67, 1921, Sections 301, 305, 309, 312, <https://www.gao.gov/assets/D03855.pdf>.

¹⁸ *Budget and Accounting Procedures Act of 1950*, Public Law 81-784, September 1950, Sections 111-112, <https://budgetcounsel.files.wordpress.com/2017/04/pub-l-81-784-budget-and-accounting-procedures-act-of-1950.pdf>.

¹⁹ "100 years of GAO," Government Accountability Office, 2021, <https://www.gao.gov/about/what-gao-does/hundred-years-of-gao>.

control over the DoD's financial operations stemmed from this legislation, which suggests that the services' concerns were well founded.²⁰

Over the past several decades, Congress has passed many other laws governing DoD and federal financial management. They include laws affecting activities such as financial controls (Federal Managers Financial Integrity Act of 1982), financial statement audits (Government Management Reform Act of 1994), financial information (Federal Financial Management Improvement Act of 1996), and data availability (Federal Funding Accountability and Transparency Act of 2006 and the Digital Accountability and Transparency Act of 2014). Two other significant acts, discussed briefly below, illustrate the many types of legislation. One act affected incentives, the other modified organization.

Prompt Payment Act of 1982

In a 1978 report, GAO analyzed a sample of 3,263 federal invoices and found that, after adjustment for factors that federal agencies could not control, about 30 percent of the invoices were paid late—that is, after more than 30 days. Only 16 percent of companies interviewed by GAO expressed dissatisfaction with the federal payment process, but GAO concluded that, while the federal government's bill payment performance was good, it should be better.²¹ A few years later in 1982, Congress passed the Prompt Payment Act, which required that DOD and other federal agencies pay bills within 30 days of receipt of a valid invoice or acceptance of the goods or services, whichever came later. Agencies had to pay interest on late payments.

In 1985, GAO examined a sample of 730 DoD invoices chosen over a four-month period and concluded that DoD paid all but 17 percent on time and performed better than civilian agencies. DoD should have paid interest on its late payments, but in many cases, such payments were not made. GAO also noted that DoD and other agencies paid some invoices early, resulting in less interest income for the government.²²

While serving as Air Force comptroller in the 1990s, the author recalls pressure to reduce interest penalties. The Air Force required that its bases pay for interest penalties on their invoices, which led them to push for prompt payments. But many factors influence interest penalty payments, including, of course, interest rates themselves, which are determined by the Department of the Treasury. These factors no doubt mean that interest penalty payments will continue to be an issue in DoD.

²⁰ Steven L. Rearden, *The Formative Years: 1947-1950* (Washington, DC: Historical Office, Office of the Secretary of Defense, 1984), 361–362, https://history.defense.gov/Portals/70/Documents/secretaryofdefense/OSDSeries_Vol1.pdf?ver=2014-05-28-130015-717.

²¹ General Accounting Office, *The Federal Government's Bill Payment Performance Is Good But Should Be Better*, Report B-160725, (Washington, DC: 1978), i, <https://www.gao.gov/assets/fgmsd-78-16.pdf>.

²² General Accounting Office, *Prompt Payment Act: Agencies Have Not Fully Achieved Available Benefits*, GAO/AFMD 86-69, (Washington, DC: 1986), 25, 29, <https://www.gao.gov/assets/afmd-86-69.pdf>.

Chief Financial Officers Act of 1990

This act, which became law in November 1990, sought to improve federal financial management in response to many criticisms from Congress and other organizations. The act strengthened the role of the OMB in financial management, in part by creating the Office of Federal Financial Management within OMB. The legislation also created a chief financial officer at DoD and other specified agencies, tasking that officer with numerous duties, including creating a financial statement for the agency and submitting it for audit. The Chief Financial Officers Act did not bring about immediate changes in DoD financial management but has gradually contributed to financial improvements.

Tightening Controls through Policy Changes

In the years after 1900, policy changes played an even more important role than legislation in tightening controls on DoD budget execution. The first of the policy changes discussed below affected the entire federal government; the others focused on DoD.

Apportionment

As noted above, amendments to the ADA in 1905 created the apportionment process. But agency heads could establish their own apportionments, which weakened the controls substantially. In 1933, President Roosevelt transferred authority for approving apportionment to the Bureau of the Budget, perhaps in part to control funding in ways that furthered his New Deal. Especially after the bureau began reporting to the president in 1939, this change made apportionment a key activity in controlling federal budget execution. Today, the bureau (known since 1970 as OMB) still retains authority to issue apportionments.

Policy Changes

- **Apportionment**
- **Reprogrammings and Transfers**
- **Unused Balances:** “M accounts”
- **1990s Changes:** prevalidation, new systems, standardizing data

In 1949, DoD’s first comptroller, Wilfred McNeil, persuaded key congressional committees to remove the authority to manage apportionments from the military services and consolidate it in the Office of the Secretary of Defense, with the authority delegated to the DoD comptroller.²³ This delegation of authority, which remains in effect today, significantly bolstered the ability of the secretary and his senior staff to control military funding. In an oral history in 1976, McNeil supported this conclusion,

²³ Richard M. Leighton, *History of the Office of the Secretary of Defense: Strategy, Money, and the New Look, 1953-1956*, (Washington, DC: Historical Office, Office of the Secretary of Defense, 2001), 46, https://history.defense.gov/Portals/70/Documents/secretaryofdefense/OSDSeries_Vol3.pdf.

stating that apportionment represents “quite a powerful process” that provides the president and the secretary of defense with significant control.²⁴

Reprogrammings and Transfers

The formulation, approval, and execution of defense budgets can require many years, including a year for programming and budgeting, at least seven months and often much more for congressional approval, and sometimes a year or more for contracting activities, especially for newly approved programs. It seems unlikely that DoD can greatly reduce these timelines. That means that, especially for high-tech programs, DoD needs the ability to move money during budget execution to reflect changes in priorities and circumstances. The majority of these shifts occur through reprogramming (moving money within an appropriation) or transfers (moving money between appropriations). These shifts represent flexibility that is critical to effective national security, which justifies a careful look at the evolution of the processes governing reprogrammings and transfers.

The term reprogramming did not come into use until the mid-1950s. But moving money within appropriations had gone on before that time, using names such as interchangeability and adjustments. Congress accepted reprogramming more readily during wartime periods, and there is evidence of reprogramming during World War II. But Congress did object when it felt that DoD abused the process. For example, during congressional hearings in 1961, the Navy revealed that it had used \$584 million, apparently obtained through reprogramming, to begin construction of five new Polaris submarines. By the time of the hearing, contracts for the ships had already been awarded. Because of these and other problems, Congress gradually tightened controls on reprogramming. In the early 1950s, Congress generally only required that it be informed of reprogrammings after the fact, but by the mid-1950s, Congress began to require that major reprogrammings be submitted for prior approval. By the 1960s, semiannual reports had to be submitted covering all reprogrammings. Congress also became more specific about the types of reprogrammings requiring congressional approval before they occurred (such as those that resulted in the start of a new program) while continuing to require prompt notification about other reprogrammings.²⁵

Using transfer authority to move money between appropriations also has a long history, including abuses. As with reprogrammings, Congress tended to authorize transfers more readily during crises. For example, the Lend-Lease Act of 1941 explicitly permitted limited transfers of funds. But in other cases, Congress cried foul. In 1793, a member of Congress charged Alexander Hamilton with illegal use of funds, implying that he had illegally transferred funds. In the 1820s and 1830s, Congress itself contributed to improper transfers by enacting appropriations two to five months late, forcing officials

²⁴ “Interview with Mr. Wilfred McNeil,” OSD Historical Office, Washington, D.C., June 7, 1976, 18, https://history.defense.gov/Portals/70/Documents/oral_history/OH_Trans_McNeilWilfred6-7-1976.pdf?ver=2014-05-28-133511-900.

²⁵ Fisher, *Presidential Spending Power*, 76–77, 81–86.

to move money to maintain operations. After his intervention in Cambodia in the spring of 1970, President Richard Nixon transferred funds even in the face of specific congressional opposition.²⁶

Efforts during the 1960s to restrict reprogrammings and transfers (hereafter usually considered together and collectively referred to as reprogramming actions) planted the seeds that eventually led to the complex system in use today. Part of today's system features legally binding caps on the amount of funds that can be reprogrammed in the base budget (that is, the non-wartime budget). For FY 2021, for example, Congress set this general transfer authority cap at \$4 billion. There is a separate figure, known as the special transfer authority cap, that limits transfers in the Overseas Contingency Operations budget, a budget that includes funding to pay the added costs of war. In FY 2021, this special transfer authority cap equaled \$2 billion. Starting with the FY 2022 budget, the administration has ended the use of the wartime Overseas Contingency Operations budget; therefore, in the future, there will be only one cap on reprogramming actions.

While the law specifies these caps, the rest of the current system for reprogramming actions exists not in law but as an informal agreement between DoD and the congressional committees that oversee the department. Under this agreement, smaller and less controversial reprogramming actions, known as below-threshold actions, can be made without prior congressional approval but must be reported to Congress quarterly. Below-threshold reprogramming actions must meet some agreed-to limits on funding (for example, those in the operation and maintenance appropriations generally cannot involve moving more than \$10 million between budget activities) and must not involve potentially controversial changes (such as starting new programs or changing congressional decisions made during its budget review). Larger or potentially more controversial reprogramming actions designated as prior approval must be submitted to all four committees that have oversight over DoD activities (plus two intelligence committees for reprogramming actions under their jurisdiction). There are also special reprogramming rules for military construction and for some administrative categories of reprogramming actions.²⁷ Even if only one committee modifies a reprogramming action, DoD cannot proceed with that action except in its modified form. If at least one committee rejects the action entirely, DoD cannot pursue the action at all.

Most of the reprogramming process exists as an informal agreement rather than in law because of constitutional limits. In 1983, the Supreme Court held that a law permitting a one-house veto of executive branch actions violated the separation of powers doctrine and was therefore unconstitutional.²⁸ Reprogramming actions allow a congressional committee in one house of Congress to change decisions made by law (for example, the level of funding in an appropriation). Therefore, if a law codified reprogramming, it would be unconstitutional.

²⁶ *Ibid.*, 99, 102–103, 105, 107–120.

²⁷ For a current and more complete description of this complex process, go to the “Budget Execution” section on the website of the Under Secretary of Defense (Comptroller) (<https://comptroller.defense.gov/>) for the latest fiscal year and then go to the “Budget Execution Flexibility Tutorial.”

²⁸ “Immigration and Naturalization Service v. Chadha,” Oyez, <https://www.oyez.org/cases/1981/80-1832>.

How much does DoD reprogramming use this current process? Reprogramming actions must be zero-sum—that is, adds to programs must be fully offset by cuts to other programs. A comprehensive measure of reprogramming actions should capture increases and decreases because both affect programs. In one recent year (FY 2019), DoD requested \$12.6 billion in prior-approval reprogramming actions (this total is the absolute sum of both increases and decreases) and Congress approved \$11.0 billion, or 87 percent.²⁹ In addition to this \$11 billion, DoD conducted \$5.3 billion in below-threshold reprogramming actions that do not require congressional approval. In total, DoD reprogrammed \$16.3 billion in FY 2019, about 2.3 percent of that year’s DoD budget. As these numbers suggest, DoD reprograms substantial sums of money, but the actions affect only a small percentage of its budget.³⁰ That percentage may be even lower in recent years than it was in the past. A study published in 1975 suggests that DoD reprogramming actions during the mid-1960s, including prior approval and below threshold actions, averaged about 6 percent of its budget.³¹

Reprogramming actions also come in other flavors. The prior-approval and below-threshold actions just discussed are substantive—that is, they move money from lower to higher-priority programs. DoD also conducts two other types of reprogramming

While reprogramming actions are small in relation to the size of DoD’s budget, they remain critical to effective management of defense funds.

actions—known as internal and letter actions—that transfer funds for proper execution (for example, moving money from a DoD-wide account to a military service account for execution) but do not make substantive changes. A recent study by the Naval Postgraduate School indicates that, from FY 2007 to FY 2018, internal and letter reprogramming actions averaged about 4 percent of the DoD budget including both increases and decreases.³² Proper budget execution requires the internal and letter approaches, but substantive reprogramming actions more accurately indicate how much reprogramming alters the defense budget.

While reprogramming actions are small in relation to the size of DoD’s budget, they remain critical to effective management of defense funds. DoD needs this process and should take steps discussed

²⁹ The prior approval totals exclude reprogramming actions for the border wall that were not conducted using the prior approval rules. An “absolute sum” is one that ignores signs. Thus, the absolute sum of +5 and -5 is 10, not zero.

³⁰ In some years, reprogramming actions have totaled more. For example, in FY 2008, at the height of the Afghan and Iraq Wars, DoD used prior approval reprogrammings to move about \$40 billion, including increases and decreases, a record level for the past 20 years. If below-threshold reprogrammings in FY 2008 were similar to those in FY 2019, then total actions constituted between 6 and 7 percent of that year’s budget. During the past 20 years, most other years had significantly lower prior approval reprogrammings. See Brendan W. McGarry, *DOD Transfer and Reprogramming Authorities: Background, Status, and Issues for Congress*, CRS Report No. R46421 (Washington, DC: Congressional Research Service, 2020), 28, <https://sgp.fas.org/crs/natsec/R46421.pdf>.

³¹ Fisher, *Presidential Spending Power*, 86–87, and author calculations.

³² Robert A. Fritsch, Jacob J. McMurtrey, and Joseph F. Sullivan, *The Nature of DoD Reprogramming and Associated Trend Analysis* (Monterey, CA: Naval Postgraduate School, 2020), 30, 32, <https://calhoun.nps.edu/handle/10945/65522>; and author calculations based on absolute sum of requests and decreases.

below (see “Assessing Budget Execution: Shortcomings and Needed Improvements”) to help ensure reprogramming remains a viable option.

Unused Balances

In the early days of the republic, the Departments of War and Navy and other federal agencies had one or two years to obligate funds. Alexander Hamilton, in his final report on public credit, urged that funds not obligated within two years after their year of appropriation go into a “surplus account” where they would no longer be available for their original purpose. Congress enacted Hamilton’s recommendation into law in 1795, but agencies found ways around it. For example, and as noted above, President Monroe invoked a technicality in 1819 and used old balances to buy ships. By the end of the Civil War in 1865, agencies had large balances of funds, and even by 1869, four years after the war ended, unobligated balances totaled \$102 million (\$3.2 billion in FY 2020 dollars), in effect doubling the total budgets of all the federal departments.³³

Unused balances occur because of the method DoD and other federal agencies use to execute funding. From the first days of the United States, DoD has used an obligate-and-disburse process that produces two types of unused balances.³⁴ Appropriated funds become obligated when an agency enters into a formal contract for personnel, services, or equipment, and until DoD has time to formalize the contract, the dollars remain as unobligated balances. Once obligated, the funds remain as unspent balances until disbursements are made for the personnel, services, or equipment. Because of the time required to create and deliver goods and services, disbursements sometimes continue to be made for many years after the signing of a contract.

Many factors influence the levels of unobligated and unspent balances. Estimates of future program costs that are too high or too low certainly play a role. For example, gross overestimates of the funding needed for the Korean War led, as of June 1958, to unobligated balances of \$32 billion in funds approved for the war (equivalent to about \$370 billion in FY 2020 dollars).³⁵ Standards for posting obligations can also influence unobligated levels. In the years after the creation of DoD in 1947, the services defined obligations in ways that were inconsistent and sometimes deceptive. For example, the Air Force, which was the most creative service in its use of definitions, frequently considered funds as obligated when a letter of intent was signed, even if the service did not sign the actual contract until much later. In August 1954, Congress passed a law standardizing the definition of a recordable obligation.³⁶ Policy changes also influence unused balances. In the 1950s, at the urging of Congress, DoD put in place a “full-funding” policy that required budgeting for most procurement

³³ Fisher, *Presidential Spending Power*, 123–125.

³⁴ The Feed and Forage Act dates back to 1799 and features obligations and expenditures. See *Ibid.*, 238.

³⁵ Edward J. Drea, *Secretaries of Defense Historical Series: McNamara, Clifford, and the Burdens of Vietnam, 1965-1969* (Washington, DC: Historical Office, Office of the Secretary of Defense, 2011), 88, https://history.defense.gov/Portals/70/Documents/secretaryofdefense/OSDSeries_Vol6.pdf?ver=2014-05-28-134006-577.

³⁶ Leighton, *History of the Office of the Secretary of Defense*, 54–55.

funds at the beginning of a program.³⁷ Full funding helped DoD and Congress understand the full costs of procurement programs before they are put in place, but the policy inevitably increased unobligated balances because more funds are appropriated upfront but are not obligated until needed.

Of all the factors that influence the size of unobligated and unspent balances, the time available to obligate and spend funds surely stands as most important. At the time of DoD's creation, Congress appropriated funds for procurement; construction; and research, development, and technology for one year. But early in DoD's life as an agency, Comptroller McNeil persuaded Congress to make "no-year" appropriations for these appropriations, which meant there was no limit on the time available for obligation or disbursement. McNeil argued that no-year availability provided time for the services to enter into contracts thoughtfully, and then if needs changed, they could alter or cancel the contract.³⁸

However, no-year funding, and the other influences noted above, led to substantial unused balances. By 1955, unobligated balances totaled \$15.7 billion (about \$210 billion in FY 2020 dollars). Congress felt that these balances weakened congressional controls and threatened to terminate their use. McNeil rose to the occasion and proposed a new funding status known as commitments. Commitments included funding for programs for which contract negotiations were well along but not far enough to permit formal obligation under the definitions of the 1954 law mentioned earlier. The commitment concept—still in use today—was apparently enough to ward off stronger congressional action, at least in the 1950s.³⁹

But the saga of unused balances had not ended. In 1969, unused balances totaled \$25.5 billion (about \$195 billion in FY 2020 dollars). In order to bring these balances under tighter control, the House Appropriations Committee proposed abolishing no-year funding and instead allowing funds to be available for obligation for limited periods: two years for research funds and three years for procurement funds (with the exception of five years for shipbuilding). The Pentagon argued that this approach would lead to year-end spending to avoid losing funding, a concern that remains today. However, after experimenting with weaker Senate restrictions, Congress put the House limits into the DoD appropriations bill for FY 1971, and the same limits are still in place.⁴⁰

But the debate over unused balances still had not ended. Once obligations had reached the end of their availability (for example, after three years for most procurement accounts), any unobligated funds entered into a surplus account for two years and maintained their fiscal year identity. After that, unobligated funds entered a merged surplus account. The merged account retained its original purpose, but funds could no longer be identified by fiscal year. Obligated but unspent balances also ended up in special accounts—commonly called M accounts—two years after the end of their

³⁷ Ronald O'Rourke and Steven Daggett, *Defense Procurement: Full Funding Policy – Background, Issues, and Options for Congress*, CRS Report No. RL31404 (Washington, DC: Congressional Research Service, 2007), 53–54, <https://fas.org/sgp/crs/natsec/RL31404.pdf>.

³⁸ Leighton, *History of the Office of the Secretary of Defense*, 51.

³⁹ *Ibid.*, 53, 57–58

⁴⁰ Fisher, *Presidential Spending Power*, 128–129.

availability. Congress established the merged surplus and M accounts in 1956; therefore, some of the monies in the accounts could have been there for decades by the time this debate was taking place around 1990.⁴¹

Congress expected merged surplus and M accounts to be used only to pay unexpected additional costs related to the original intent of the program, but that did not always happen. Around 1990, for example, the Air Force used more than \$1 billion of its surplus and merged surplus funds to pay for contract modifications and other expenses for the B-1B bomber—about twice the amount that the B-1B program had contributed to the accounts. By the end of FY 1989, DoD’s merged surplus and M accounts contained hefty balances, totaling \$43.5 billion (roughly \$90 billion in FY 2020 dollars).⁴²

Because of their large size and the lack of controls, Congress abolished these accounts in 1990 and established yet another set of procedures. DoD now had to track each account during its period of availability for obligation (for example, two years for research accounts). At the end of that period, any unobligated balances “expire” and can no longer be used except for limited purposes, such as upward

[T]he new procedures established in 1990 finally ended, or at least significantly muted, a debate over unobligated and unspent balances that had been going on for more than 200 years.

adjustments in costs associated with the original purchase. After expiration, obligated balances can be used to pay bills incurred by the account for up to five years. Then the funds “cancel” and cannot be used for any purpose except fixing clerical errors. Spending incurred after five years in any account could only be accomplished after receiving a new appropriation. These complex procedures remain in place today.⁴³

DoD’s budget execution process guarantees there will be unobligated balances, as the Pentagon works to finalize contracts, and unspent balances, as vendors produce and deliver goods and services before being paid. Congress generally favors having some unobligated balances because they can use them to finance initiatives they favor even when they are not in the president’s budget request, but Congress does not want DoD to have too large a “slush fund” that it can potentially use without approval. The procedures put in place in 1990 seem to have satisfied both congressional desires. Under the new procedures, DoD must maintain detailed records on every account appropriated by Congress for at least 6 years and sometimes for 10 years or more. This clearly adds to the cost of DoD financial management. But the new procedures established in 1990 finally ended, or at least significantly muted, a debate over unobligated and unspent balances that had been going on for more than 200 years.

⁴¹ Milton J. Socolar, “The Government’s Use of ‘M’ and Merged Surplus Accounts,” statement before the Senate Committee on Governmental Affairs, 101st Cong., 2nd sess., August 2, 1990, 2–4, <https://www.gao.gov/assets/t-afmd-90-26.pdf>.

⁴² Ibid., 4, 7–8.

⁴³ General Accounting Office, *Agencies’ Actions to Eliminate M-Accounts and Merged Surplus Authority* (Washington, DC: 1993), 1–2, <https://www.gao.gov/assets/afmd-93-7.pdf>.

Accounting Process Changes in the 1990s

Starting around 1993, the Pentagon began making far-reaching changes in its accounting policies, further tightening financial controls. In his first and only annual report as secretary of defense, Les Aspin (who served as secretary from early 1993 to early 1994) called on DoD to assess and improve its financial management practices, with a focus on budget execution. His 1994 annual report to Congress and the president noted that, in the past year, DoD disbursed \$19 billion that could not be directly related to obligated funds, and during the first six months of FY 1993, the Pentagon overpaid its contractors by \$750 million, funds that later had to be recovered.⁴⁴ Aspin departed as secretary after only about one year, but his successor William Perry (who served as secretary from 1994 to 1997) continued the financial reform efforts, ably led by John Hamre, who served as comptroller for both secretaries and later became the deputy secretary of defense.

Process changes in the 1990s came about in part because of criticism from leaders outside of DoD. In 1993, Charles Bowsher—at the time the GAO director—reported that he found extremely serious accounting control weaknesses in all three military services.⁴⁵ In 1994, Senator Chuck Grassley (R-IA) decried “the breakdown of discipline and integrity in financial management . . . specifically within the Defense Department.”⁴⁶ A year later, Grassley described DoD financial management as a “fiscal horror show.”⁴⁷ Nor have the criticisms been partisan. Senator Tom Carper (D-DE) has also been a longtime critic of defense spending practices. In 1994, Aspin himself stated that henceforth DoD would work with, not against, congressional committees and others seeking to put in place genuine improvements in DoD financial management.⁴⁸

In his 1994 annual report, Aspin outlined the principles that should guide efforts to improve financial management and especially budget execution. They included:

- Comply strictly with current policy and legal requirements, even if they cause some inefficiency in the period before new approaches can be developed;
- Reengineer business practices to eliminate unneeded processes and improve those that remain;
- Standardize definitions, concepts, and practices;
- Design and implement new, modern accounting systems; and
- Practice candor and engender confidence.⁴⁹

⁴⁴ Les Aspin, *Annual Report to the President and the Congress* (Washington, DC: Department of Defense, 1994), 97, https://history.defense.gov/Portals/70/Documents/annual_reports/1994_DoD_AR.pdf?ver=2014-06-24-152508-117.

⁴⁵ Richard H.P. Sia, “Pentagon’s accounting is in a mess: GAO finds billions of mismanaged funds in Army, Navy, and Air Force accounts,” *Baltimore Sun*, April 30, 1993, <https://www.baltimoresun.com/news/bs-xpm-1993-04-30-1993120156-story.html>.

⁴⁶ Charles Grassley, “M accounts,” *Congressional Record*, U.S. Senate, January 28, 1994, S354.

⁴⁷ Elaine M. Grossman, “Senator Grassley Lambasts Pentagon Accounting, Calls for Spending Freeze,” *Inside the Pentagon* 11, no. 12 (March 1995), <https://www.jstor.org/stable/43990800?seq=1>.

⁴⁸ Aspin, *Annual Report to the President and the Congress*, 97.

⁴⁹ *Ibid.*, 98–99.

One of the most significant process improvements, begun in the mid-1990s, involved problem disbursements. Because financial data often had to be manually entered into DoD's accounting systems, errors occurred which, in a department that made millions of commercial payments each year, led to a substantial number of accounts with incorrect balances. Prior to about 1995, DoD did not effectively check these accounts to be sure that funds remained available before disbursing funds to pay bills. Problem disbursements accumulated over time, and by the end of FY 1993, they totaled about \$51 billion (approximately \$95 billion in FY 2020 dollars), which included disbursements that could not be matched to obligations (unmatched disbursements), disbursements made against accounts that did not have enough funds available (negative unliquidated obligations or NULOs—an acronym that always reminded the author of an exotic African animal), and disbursements made by the Treasury Department but that had not been received by DoD accounting stations for processing for at least a month (in-transit disbursements). DoD pointed out that its financial processes could verify that the goods and services associated with this \$51 billion had been received, but clearly the accounting processes needed to be improved.

To do so, DoD began to prevalidate disbursements associated with commercial payments—that is, before paying, DoD checked to make sure the disbursements could be matched to obligations and that adequate obligations were available to permit the disbursement to be made. Disbursements failing these tests had to be hand-researched and the accounts corrected before payments could be made. Congress passed a law requiring that prevalidation begin in July 1995, but because of the workload involved, the law only required prevalidation of disbursements of \$5 million or more. By October 1995, DoD had lowered the threshold to \$1 million except for large, complex payments. As processes improved, DoD gradually reduced the prevalidation thresholds, but only in FY 2005, 10 years after prevalidation began, did the procedure apply to all disbursements regardless of their size or complexity.

Prevalidation dramatically lowered the level of problem disbursements. By August 1998, DoD reported \$8.1 billion in problem disbursements compared with \$51 billion five years earlier. The continued lowering of the prevalidation threshold to zero resulted in substantial further reductions in these types of disbursements. More recently, the implementation of new accounting systems has led to fluctuations in problem disbursements, including some modest increases.

DoD also made substantial progress in reducing another type of troublesome disbursements—overpayments to its contractors. During the first six months of FY 1993, these overpayments amounted to about \$750 million due to problems such as erroneous entries made during manual transfers of data between IT systems and duplicate payments caused by clerical errors. By making additional checks before releasing payments and through greater use of electronic transfers of data, DoD reduced contractor overpayments to about \$100 million during all of FY 1998. In succeeding years, DoD greatly increased electronic data transfer and instituted automatic checks to avoid duplicate payments. These new processes have further reduced contractor overpayments but have not fully eliminated them.

Progress on some process changes came about more slowly, especially those related to financial systems. In 1991, DoD began consolidating finance and accounting systems. Starting from a count of 324 systems in 1991, the department reduced the number of such systems to 156 by 1998. Using the same definition, today's system count would be about 60, but DoD has broadened the definition of systems and so it reports a higher number.⁵⁰ Fewer systems reduced operating costs and permitted DoD to concentrate on improving financial controls in a smaller number of systems.

Even more important, DoD began working to install modern accounting systems using off-the-shelf software known as enterprise resource planning (ERP) systems. These ERPs not only perform financial accounting but also accumulate and process information for many activities—such as logistics, human resources, and acquisition—that “feed” data into the financial accounting system. Ideally, the new ERPs would not only have replaced DoD's legacy accounting systems but also its legacy feeder systems. However, because of the complexity of DoD's feeder systems and also because of DoD's reluctance to make changes in current processes in order to use the ERP feeders, the ERPs often must rely on existing feeder systems. Existing feeders, while generally linked electronically to accounting systems, do not always provide data that is complete or in standardized formats, which leads to additional work.

Despite these various problems, it is important to recognize that the ERPs have led to important improvements in financial controls.

Implementation of these new ERPs has taken many years and still continues as this paper is written. Each military service has at least one ERP, and two additional ERPs serve all the defense agencies. The Army's principal financial ERP, the General Fund Enterprise Business System (GFEBS), received the go-ahead for full deployment in 2011 and is now essentially fully deployed. The ERP that serves most defense agencies, the Defense Agency Initiative (DAI), is also almost fully deployed as this paper is written, and, notably, the Marine Corps has decided to use the DAI ERP to replace its older financial system. The Air Force ERP, the Defense Enterprise Accounting and Management System (DEAMS), instituted an early release in 2010 and is largely deployed except for the service's acquisition command. The Navy began deployment of its ERP, known simply as the Navy ERP, around 2000 but has not yet deployed the system throughout the Navy, though it is planning to do so.

Like most major reforms, the ERP accounting systems suffered pains during birth, including temporary increases in problem disbursements and delays in commercial payments. The degree of the problems varied widely by service.⁵¹ Most services customized their systems to meet unique

⁵⁰ DoD has begun including in its count some so-called “feeder systems” that provide information to the accounting systems. Using this new definition, the department currently reports slightly more than 200 financial systems. The total number of business systems exceeds 1,800.

⁵¹ Peter Levine, *Defense Management Reform: How to Make the Pentagon Work Better and Cost Less* (Stanford: Stanford University Press, 2020), 202-204.

service needs, significantly in some cases, which will make it more costly to keep them current as new software releases become available. Also, because implementation continues for some of these ERPs, the services and agencies continue to operate one or more legacy accounting systems. A 2020 GAO report concluded that DoD still operates 12 legacy accounting systems, which added about \$81 million to DoD's operating costs in 2020.⁵² Finally, as proof of the old adage that no good deed goes unpunished, the scope and transparency of ERPs have made certain sensitive data fully visible—for example, some intelligence information—and special approaches such as maintaining legacy systems have been required to avoid releasing classified information to staff personnel who do not have security clearances or a need to know the information. Despite these various problems, it is important to recognize that the ERPs have led to important improvements in financial controls.

Another process change that has taken place slowly, but which offers the potential for major improvements, involves standardizing DoD financial data. Prior to the process changes starting in the mid-1990s, the military services each defined the data elements used to record financial information. That suited the services, who prefer independence, but meant that DoD could not compare and combine financial data across the services except at high levels of aggregation. As part of the process changes discussed in this section, DoD began to formulate a set of data elements that came to be known as the Standard Financial Information Structure (SFIS). SFIS data elements support budgeting, financial accounting, cost/performance comparisons, and external reporting needs. In part because of service reluctance, and also because of the time and cost to add SFIS to systems, including some legacy systems soon destined for retirement, SFIS was not ready for implementation for a number of years. Today, all the new accounting systems employ SFIS, though they sometimes use versions that differ in their details, while other DoD financial systems require data to be translated into the SFIS structure using crosswalk tables. Current plans call for full SFIS compliance by early 2023.

How much will SFIS help? In an organization as large as DoD, all data cannot realistically be made standard. But by emphasizing standardization of the most important and widely used data, SFIS can accomplish another significant step toward more consistent financial management at the Pentagon.

Financial audits represent yet another process change that has come slowly to DoD. In 1994, Congress passed the Government Management Reform Act, which required that all federal agencies have financial statements that have been independently audited. However, the defense secretary's annual reports issued after 1994, despite containing significant sections on financial process reform, did not even mention auditable financial statements until 1998 and even then touched on them only briefly.⁵³ DoD has become much more committed to auditable financials in more recent years. Nevertheless, as this paper is written, DoD has not yet achieved auditable financial statements in any military service, though it has achieved and sustained auditable statements in 10 of its smaller entities, including some that have asset values exceeding those in many civilian agencies. DoD has had difficulty achieving

⁵² Government Accountability Office, *Financial Management: DoD Needs to Implement Comprehensive Plans to Improve Its Systems Environment*, GAO-20-252, (Washington, DC: 2020), 65, <https://www.gao.gov/assets/gao-20-252.pdf>.

⁵³ William S. Cohen, *Annual Report to the President and the Congress* (Washington, DC: Department of Defense, 1998), 158, https://history.defense.gov/Portals/70/Documents/annual_reports/1998_DoD_AR.pdf?ver=2014-06-24-153404-623.

auditable financial statements for many reasons, including financial systems (especially feeder systems) that do not have adequate financial controls, accounting practices that are not sufficiently transparent to meet audit requirements, and the size of complexity of DoD, which makes it difficult and time-consuming to make needed changes. A detailed discussion of evaluation and audit, much of which occur after budget execution, is beyond the scope of this paper.

Secretary of Defense William Cohen’s annual report in 1998 stated that “DoD leaders have undertaken the most comprehensive reform of financial management systems and practices in DoD history.”⁵⁴ The history of budget execution in the twentieth century featured changes such as the ADA, creation of the apportionment process, and major reforms of processes governing reprogramming actions and unused balances. Therefore, Cohen’s assertion goes too far. However, there is no doubt that the accounting process changes that started in the mid-1990s significantly altered and improved DoD budget execution.

[T]here is no doubt that the accounting process changes that started in the mid-1990s significantly altered and improved DoD budget execution.

Increasing Congressional Restrictions

Congressional Restrictions

- **Authorization Bills**
- **Appropriation Bills**
- **Bill Reports**

Some of the most significant tightening of restrictions on budget execution has come about because of changes made by Congress. Congress passes two types of acts for the DoD—authorization acts (recommended to Congress by the House and Senate Armed Services Committees) and appropriations acts (recommended by the defense subcommittees of the

House and Senate Appropriation Committees). Increases in the size and scope of these acts constitute a rough proxy for growth in congressional guidance and restrictions. In FY 1975, the DoD authorization act filled just 11 pages of text (see Figure 1). That authorization act detailed the dollar levels for appropriations for procurement and for research, development, test, and evaluation and provided a few specifics about individual weapon programs. The FY 1975 act also specified personnel levels (for active military, reserves, and civilians), detailed military training student loads, and included a few general provisions that imposed specific restrictions or required DoD to provide information. By FY 1985, the authorization act had grown to 169 pages and included authorization for the operation and maintenance appropriations as well as sections on compensation, other personnel benefits, and procurement reform. The FY 2005 version of the authorization act soared to 788 pages, while the FY

⁵⁴ Ibid., 154.

2020 version featured 1,120 pages of text. In both these years, the added pages mostly stemmed from more detailed guidance rather than new categories of authorizations, though a separate section on DoD healthcare did appear in 2005 and 2020, as did wartime funding authorizations. Current versions of the authorization act contain about 100 pages of tables detailing the costs of thousands of defense programs, which Congress added to the bill text to ensure that DoD complied with its guidance.

Defense appropriations acts fill many fewer pages and have grown much more slowly than the authorizing acts.⁵⁵ In FY 1975, the DoD appropriation act consumed 22 pages, while the FY 2020 version contained 68 pages. In FY 2009 and later years, the appropriation acts contain a Section 8006 that renders legally binding some of the dollar levels in the explanatory statement accompanying the acts. The appropriators, like the authorizers, made these dollar levels legally binding to ensure DoD compliance.

Since Laird expressed these concerns in 1973, congressional restrictions, at least as measured by number of pages of bill text, have tripled in the defense appropriation subcommittees and increased about a hundredfold in the authorizing committees.

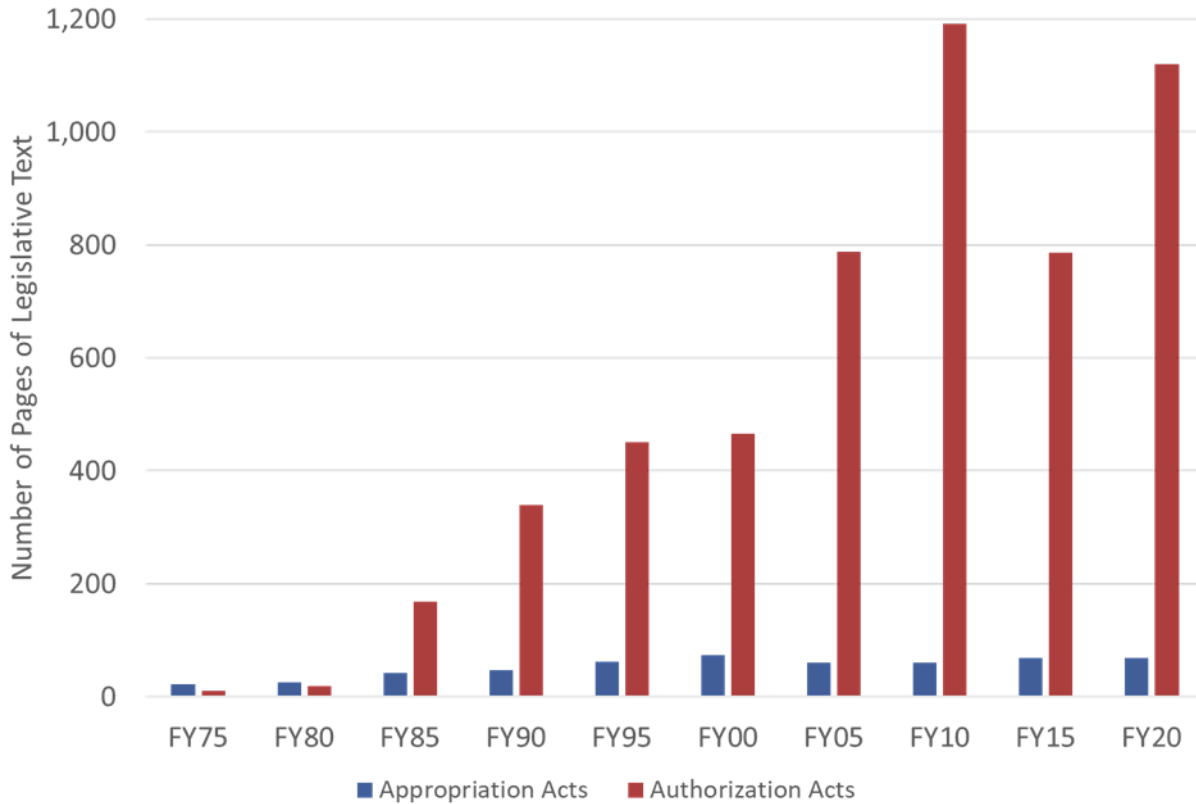
The texts of these acts do not represent the only congressional guidance imposed on the Pentagon. The committees and subcommittees involved in writing the authorization and appropriation acts issue reports that explain their actions. Today these reports are voluminous. In FY 2020, the two authorizing committees issued separate reports that together totaled almost 1,300 pages. The two subcommittees dealing with DoD appropriations issued separate reports totaling about 730 pages, roughly triple the length of the same types of reports issued in the early 1970s.⁵⁶ Much of the material in these reports duplicates provisions in the bill texts discussed above. However, for some DoD programs not listed in the bill texts, the reports designate them

as items of special interest to Congress, which restricts the DoD's ability to move funds during budget execution without prior congressional approval.

⁵⁵ Congress appropriates funds for most of DoD in the defense appropriations act. There is also a separate appropriation act for military construction and DoD family housing that is part of a bill covering Military Construction, Veterans Affairs, and Related Agencies. This legislation is excluded from this discussion but has a relatively small number of bill text pages (10 pages in FY 2020).

⁵⁶ "Armed Forces Comptroller," *American Society of Military Comptrollers* 53, no. 4 (Fall 2008), 28.

Figure 1: Pages in Defense Appropriation and Defense Authorization Bills



Source: National Defense Appropriations Acts and National Defense Authorization Acts, FY 1975–FY 2020.

In 1973, in his final report to Congress, Secretary of Defense Melvin Laird (who served as secretary from 1969 to 1973) expressed concern about duplicative reviews by congressional committees and ever-more-detailed controls imposed by Congress, including the increasing numbers of restrictive legislative provisions. Laird certainly knew Congress. He served as a member of the House for 16 years before becoming the secretary of defense, including service as a member of the defense subcommittee of the House Appropriations Committee. Yet he forcefully criticized the increasing congressional controls because they were costly to administer and adversely impacted the cost effectiveness of defense programs.⁵⁷ Since Laird expressed these concerns in 1973, congressional restrictions, at least as measured by numbers of pages of bill text, have tripled in the defense appropriation subcommittees and increased about a hundredfold in the authorizing committees.

⁵⁷ Melvin R. Laird, *Final Report to the Congress* (Washington, DC: House Armed Services Committee, January 8, 1973), 56–57, <https://tile.loc.gov/storage-services/service/sgp/sgpmbb/00416159828/00416159828.pdf>.

3 | Streamlining Budget Execution

Financial management costs, including the costs of budget execution, represent overhead costs for DoD. The department has sought to reduce those costs by streamlining budget execution activities even as some of the trends discussed above, including more complex accounting processes and congressional restrictions, have increased the cost of Pentagon financial management. In an earlier paper, the author concluded that attempts to streamline DoD budget formulation processes had generally not succeeded.⁵⁸ In contrast, several efforts to streamline DoD budget execution have succeeded, though sometimes after difficult start-up problems, and these successes have led to substantial reductions in costs.

Streamlining Budget Execution

- **Electronic Funds Transfer**
- **Travel Card**
- **Purchase Card**
- **Defense Finance and Accounting Service**

This section of the paper discusses four initiatives that have streamlined DoD budget execution significantly in recent decades, including an especially important one involving the consolidation of finance and accounting activities. Additional initiatives that may streamline some aspects of budget execution, notably the implementation of new accounting systems, were discussed above because those efforts primarily sought to tighten controls.

Electronic Funds Transfer

As early as about 1870, Western Union began transmitting some commercial funds electronically using telegraphs. But electronic funds transfer (EFT) was not used heavily in the United States until the 1990s when the wide availability of the internet greatly facilitated the transfers. In 1996, Congress passed the Debt Collection Improvement Act, which required that almost all federal payments be made using EFT no later than January 1, 1999. The act exempted a few activities that involve DoD, including transactions denominated primarily in foreign currencies and some activities that are classified or related to war.⁵⁹ But almost all DoD payments, both to employees and contractors, had to be accomplished electronically.

Some portions of DoD payments such as military pay began to use EFT well before the 1996 act. But full implementation of EFT required numerous additional process changes. All employees, including

⁵⁸ Hale, *Financing the Fight*, 18.

⁵⁹ Department of Defense, *DoD Financial Management Regulation*, Vol. 5, (Washington, DC: August 1999), Chapter 24 "Electronic Commerce," https://comptroller.defense.gov/Portals/45/documents/fmr/archive/05arch/05_24_Aug99.pdf.

new military recruits, had to have bank accounts. The law required DoD civilians to use EFT, but the department had to work with employee unions regarding implementation. New contracts with all DoD vendors had to specify the use of EFT for payments.

These process changes paid off. Making an electronic payment is safer and quicker than paying with a paper check. EFT also reduces processing compared with paper checks, in part by eliminating mailing costs. From the end of 1998, as EFT was being implemented, through the end of 2000, when it was fully implemented, employment at DoD's accounting and finance activity declined by about 1,000 persons. Many factors no doubt contributed to this decline. But if even only one-tenth of this reduction reflects the effects of EFT, the new process saved DoD ten million dollars a year. Actual savings were probably substantially larger.

Travel Card

DoD personnel travel extensively as part of their work, resulting in about 4 million travel payments made to defense employees in FY 2020. Until the late 1990s, DoD personnel typically received cash advances to pay their travel costs. After the trip, travelers filed a voucher along with receipts to document how much they spent and returned any unused cash. Bases and installations had staffs of personnel to provide cash advances, review vouchers, maintain records, and provide security for what were sometimes large stocks of U.S. cash. During the mid-1990s, while serving as Air Force comptroller, the author visited Incirlik Air Force Base in Turkey where he inspected a bank vault that held one million dollars in U.S. cash.

Some parts of DoD began experimenting with travel cards in the early 1990s. In 1998, the Travel and Transportation Reform Act required that all federal employees use credit cards to pay costs associated with official government travel, and DoD began issuing the new cards soon thereafter. Most were individually-billed cards—that is, commercial banks issued the cards to individual employees who were responsible for paying the credit card bills.⁶⁰ When the system worked as designed, the traveler used the card for expenses related to official government travel, filed a voucher for travel costs, and utilized the resulting government payment to pay the credit card bill.

However, during the early days of this program, the system did not always work as designed. Sometimes DoD personnel misused the cards. Even though regulations required that they be used only to pay costs for official government travel, a few military and civilian employees used them for obviously inappropriate expenditures, including cruises, personal clothing, gambling bills, cash at adult entertainment sites, and, in one case, a used car. Sometimes voucher payments came too late to be used to pay the credit card bills on time, which could cause individuals to be late in paying their bills. The cards were issued to all personnel who had to travel, regardless of their creditworthiness,

⁶⁰ Some cards, typically for group travel (e.g., travel of groups such as bands), were centrally billed with charges paid by the government. These cards are not discussed in this paper.

including some employees who did not have the financial skills to manage credit card payments. For all these reasons, DoD experienced large travel card delinquencies. From 2000 to 2002, delinquency rates for Army credit cardholders ranged from about 10 percent to about 18 percent of billings. From 1998 to 2002, the bank managing the card had to write off about \$34 million in bad debts. Cardholders in the other services had lower but still significant delinquency rates, ranging from about 6 percent to 12 percent. Banks responded by requiring higher fees and by reducing rebates to the services that, under DoD's contract, banks owed for proper use of the cards.⁶¹

Despite its rocky start, the travel card program has clearly made DoD more efficient.

The travel cards also added to workloads at already busy military bases and installations. Personnel with delinquent travel card accounts had to be counseled and their activities monitored to be sure the delinquencies did not recur. Those who made

personal purchases using the cards had to be disciplined. Already busy legal and command staffs had to find time for this new work, which made the card program highly unpopular. During the early days of the card program, an Air Force general approached the author, who at the time served as comptroller of the Air Force, and offered to find personnel from within his current staffing levels to manage cash travel payments if only the (expletive deleted) travel card program was eliminated.

Gradually DoD found ways to lower delinquencies. The department approved lower credit limits for newer employees, and some services stopped providing cards to infrequent travelers. Congress permitted forms of garnishment to cover unpaid credit card bills. DoD implemented split disbursements that sent some travel reimbursements, such as those for airline tickets, directly to the vendor. Working with the banks, DoD blocked the use of the cards for types of expenses not normally incurred during official government travel. (Sometimes, though, there were unintended consequences, such as a ban on using cards to pay for dog kennels, which left military personnel with working dogs unable to pay legitimate bills.) Delinquency rates fell, averaging slightly less than 3 percent in 2010, which was similar to rates at other federal agencies. Lower delinquencies eased the workload associated with handling them.

Despite its rocky start, the travel card program has clearly made DoD more efficient. The card made trips safer because travelers carried less cash. The card led to reduced budgets by eliminating positions at hundreds of military bases that had been needed to manage cash advances and provide oversight for large cash stocks. The card also increased the time available for mission work because travelers no longer had to go to the base finance office to secure a travel advance and then return after the trip to file a voucher and return unused cash. In 1997, at the author's request, Air Force experts performed a cost analysis, concluding that use of the travel card saved about \$34 per

⁶¹ General Accounting Office, *Travel Cards: Control Weaknesses Leave Army Subject to Potential Fraud and Abuse*, GAO-03-169 (Washington, DC: 2002), 10–11, 28, <https://www.gao.gov/assets/gao-03-169.pdf>.

transaction (in FY 2020 dollars) compared with costs using manual cash advances. Assuming Air Force results apply throughout DoD, this analysis suggests savings of about \$150 million a year for DoD as a whole, mostly because travel vouchers no longer have to be processed and because travelers spend less time on travel preparations, which in turn translates into fewer personnel needed to accomplish mission activities.

The Defense Travel System (DTS), introduced in 1998, sought to further streamline DoD travel. DTS provided travelers an automated tool to make travel arrangements and then file vouchers seeking reimbursements. For at least 10 years, DTS suffered from low usage and general user dissatisfaction.⁶² Today, however, about 100,000 DoD personnel access DTS on an average day, and the system handles 25,000 transactions a day. Its automated vouchers have reduced the cost of financial processing related to travel.

Purchase Card

The use of credit cards to make purchases of goods and services needed by DoD and other federal agencies dates back to the 1980s. But extensive use of government purchase cards did not begin until the 1990s when President Clinton's National Performance Review called for increased use of the cards to streamline government purchasing. In 1994, Congress passed the Federal Acquisition Streamlining Act, which established the category of "micropurchases," defined at that time as purchases of goods costing \$2,500 or less. The act changed the law so that micropurchases no longer had to be based on competitive bids, so long as the buyer considered the price to be reasonable, and exempted them from the restrictions of the Buy America Act and the Small Business Act.⁶³ While most cardholders had to comply with the micropurchase threshold of \$2,500 per purchase, some personnel with contracting authority could use the cards to make payments for larger amounts. By 2014, DoD conducted about 5.3 million transactions using purchase cards, with a total spending of about \$5 billion. Micro-purchases accounted for almost all the transactions in terms of numbers and about \$3 billion of the total spending.

Like the travel card, the purchase card program experienced problems in its early years. The government itself paid the bills for the purchase card, so this program avoided the plague of delinquencies experienced by the travel card. But a few users made personal purchases using the government card, including Navy cardholders who bought more than \$600,000 of items for personal

⁶² Vic Snyder, "Oversight of the Defense Travel System," Statement before the Oversight and Investigations Subcommittee, House Armed Services Committee, 110th Cong., 2nd sess., April 15, 2008), <https://www.govinfo.gov/content/pkg/CHRG-110hhrg43785/html/CHRG-110hhrg43785.htm>.

⁶³ Garrett Hatch, *Misuse of Government Purchase Cards: Background, Legislation, and Analysis*, CRS Report No. R46106 (Washington, DC: Congressional Research Service, 2019), 1–2, <https://fas.org/sgp/crs/misc/R46106.pdf>.

That estimate suggests the purchase card program saves DoD nearly \$400 million a year.

use before being caught. Cardholders also sometimes split purchases, making two purchases of the same good or service to evade the \$2,500 limit. DoD did not always provide adequate training for cardholders, and some approving

officials charged with monitoring credit card bills failed to do so or did so inconsistently. In 2012, Congress passed the Government Charge Card Abuse Prevention Act to help remedy these problems, and DoD and other agencies worked to improve their programs.⁶⁴ In 2017, a GAO audit examined a sample of card transactions and found little evidence of improper or fraudulent purchases, though there were still some problems with program documentation.⁶⁵ Notably, in 2018, Congress permitted DoD to increase the micropurchase threshold to \$10,000. Congress has also permitted DoD to use commercial credit cards for purchases such as fuel.

DoD's purchase card program substantially increased the department's efficiency. Prior to use of the card, even small purchases required a paper requisition that had to be approved by a contracting official, who then had to accommodate any competition requirements, arrange for the purchase and payment, and handle related paperwork. With the card, smaller purchases avoided most of these steps, reducing costs and speeding transactions. The General Services Administration estimates that the government purchase card reduces administrative costs by \$70 per transaction compared with a written purchase order.⁶⁶ That estimate suggests the purchase card program saves DoD nearly \$400 million a year.

Defense Finance and Accounting Service

As the Cold War ended, DoD reduced its military forces sharply. The department undertook a self-appraisal of its business processes in order to reduce overhead costs, transmitting the results to the president in the July 1989 Defense Management Review. That report focused on DoD's management structure and its acquisition processes and did not address finance and accounting.⁶⁷ However, the report inspired other reform proposals. One called for the consolidation of DoD accounting and finance functions into a single organization, rather than having these functions performed separately by each of the four military services along with the Defense Logistics Agency and the Washington headquarters service.⁶⁸ The consolidation concept was not new. In 1988, the Defense Logistics Agency

⁶⁴ *Ibid.*, 4–9.

⁶⁵ Government Accountability Office, *Government Purchase Cards: Little Evidence of Potential Fraud Found in Small Purchases, but Documentation Issues Exist*, GAO-17-276 (Washington, DC: 2017), <https://www.gao.gov/assets/gao-17-276.pdf>.

⁶⁶ "GSA Smart Pay Benefits," U.S. General Services Administration, <https://smartpay.gsa.gov/gsa-smartpay-benefits>.

⁶⁷ Dick Cheney, *Defense Management Report to the President* (Washington, DC: DOD, 1989), https://history.defense.gov/Portals/70/Documents/acq_documents/report_cheney.pdf.

⁶⁸ Dick Cheney, *Annual Report to the President and the Congress* (Washington, DC: DOD, 1991), 32, https://history.defense.gov/Portals/70/Documents/annual_reports/1991_DoD_AR.pdf?ver=2014-06-24-151830-167.

had consolidated contract payment functions at a new center in Columbus, Ohio.⁶⁹ That same year, the Army had considered consolidating some of its accounting and finance activities but put the proposal on hold pending DoD-wide action.⁷⁰

DFAS Established

In July 1990, the deputy secretary of defense directed the establishment of a single organization to conduct DoD finance and accounting but called for a study to determine how to implement the decision. Albert Conte, who would become the first head of DoD's new finance and accounting organization, led a study team of about 45 persons drawn from all of the services.⁷¹ After the study was complete, DoD issued a directive dated November 26, 1990, that established the Defense Finance and Accounting Service (DFAS) and tasked the new service with carrying out the consolidation.⁷²

In January 1991, DFAS started its life as a new defense agency and assumed responsibility for achieving several major goals:

- Consolidate more than 300 finance and accounting offices into a smaller number of organizations;
- Identify and implement single, DoD-wide systems to pay military, civilians, and retirees;
- Reduce the number of accounting systems by as many as 100;
- Streamline and reduce the size of DoD financial regulations, which in early 1991 filled 70,000 pages; and
- Achieve annual savings of \$150 million within five years.⁷³

With these goals in mind, DFAS began its efforts to consolidate and streamline DoD's finance and accounting services. The new agency took over four major centers previously operated by the military services (one for each service) along with the Defense Logistics Agency center that processed contract payments. DFAS also took over some of the functions at more than 300 smaller finance and accounting activities, mostly located at military bases or installations. Initially, DFAS left these organizations where they were. Then in 1992, the secretary of defense directed DFAS to perform an evaluation of the best locations for regional facilities, and as these locations were chosen and facilities established, DFAS closed the small base-level activities and moved their functions either to one of the

⁶⁹ Department of Defense Inspector General, *Audit Report on the Consolidation and Transfer of Contractor Payments to the Defense Finance and Accounting Service – Columbus Center*, Report No. 92-093 (Washington, DC: Department of Defense, 1992), 2, <https://media.defense.gov/1992/May/15/2001714646/-1/-1/1/92-093.pdf>.

⁷⁰ Morgan F. Denny, *The Finance Corps Today and Tomorrow* (Carlisle, PA: U.S. Army War College, 1992), 37–38, <https://apps.dtic.mil/dtic/tr/fulltext/u2/a251327.pdf>.

⁷¹ *Ibid.*, 35–36.

⁷² “Directive 5118.5: Defense Finance and Accounting Service,” Department of Defense, November 26, 1990, https://biotech.law.lsu.edu/blaw/dodd/corres/pdf/d51185wch1_112690/d51185p.pdf.

⁷³ Goals drawn from Dick Cheney, *Annual Report to the President and the Congress* (Washington, DC: DOD, 1993), 33–35, https://history.defense.gov/Portals/70/Documents/annual_reports/1993_DoD_AR.pdf?ver=2014-06-24-152422-603; and William J. Perry, *Annual Report to the President and the Congress* (Washington, DC: DOD, 1996), 104–106, https://history.defense.gov/Portals/70/Documents/annual_reports/1996_DoD_AR.pdf?ver=2014-06-24-153009-697.

five large centers or to one of 20 newly-established regional locations, which they called operating locations.⁷⁴ By September 1996, DFAS had closed or consolidated 230 activities.

DFAS also began consolidating pay and accounting systems. Having inherited some 22 versions of the military pay system and separate management of military pay in each service, DFAS worked to standardize the systems and their management.⁷⁵ The new agency streamlined other DoD payment activities, choosing one system each for civilian pay, retired and annuitant pay, transportation payments, and debt management. DFAS also consolidated accounting systems and reduced their number. By 1995, accounting systems for general funds (that is, funds appropriated by Congress) had been reduced from 91 to 77, with further reductions planned. DFAS identified 18 accounting systems for the Defense Business Operations Fund (whose organizations, including DFAS, billed their DoD customers for their services and so required special accounting systems) and planned to use them to replace the 77 systems that DFAS had inherited.⁷⁶ Finally, DoD's new accounting and finance organization attacked the 70,000 pages of defense financial regulations, seeking a single manual with 15 volumes and a 70 percent reduction in the number of pages.⁷⁷ Today, the regulations number about 7,000 pages. These important regulations have also been put online and made searchable, which has greatly improved their availability to financial managers and other professionals.

Early Criticisms and Concerns

Despite this progress, DFAS had many critics. In 1995, GAO criticized the organization's decision to open 20 operating locations, arguing that DFAS had not yet performed the analyses necessary to identify needed workload and hence the number of required locations. In addition, GAO argued that selecting sites based in part on the availability of excess DoD property led DFAS to occupy some facilities not well suited to finance and accounting work. Finally, GAO believed that DFAS should reengineer finance and accounting activities before opening new locations. DoD generally concurred with the GAO criticisms but, for the most part, proceeded with the consolidation.⁷⁸

The military services also criticized the new organization, sometimes sharply. The author served as the Air Force comptroller from 1994 to 2001 and often heard these criticisms. Some of the complaints reflected the growing pains associated with creating a large, new organization. During the first six years of its operations, as DFAS closed local finance and accounting offices and moved them to centers or operating locations, only an average of about 20 percent of the personnel transferred from the closed offices to the DFAS locations.⁷⁹ Thus, DFAS had to train many new personnel, and for a time, operated with a substantial number of inexperienced employees while also dealing with a large

⁷⁴ General Accounting Office, *DoD's Planned Finance and Accounting Infrastructure Is Larger and More Costly Than Necessary*, NSIAD-95-127 (Washington, DC: 1995), 3-4, <https://www.gao.gov/assets/nsiad-95-127.pdf>.

⁷⁵ Perry, *Annual Report to the President and the Congress*, 105.

⁷⁶ *Ibid.*, 104-106.

⁷⁷ Cheney, *Annual Report*, January 1993, 33.

⁷⁸ General Accounting Office, *DoD's Planned Finance and Accounting Infrastructure*, 2, 29.

⁷⁹ Defense Finance and Accounting Service, *Working Capital Fund Report FY 1998* (Washington, DC: Department of Defense, 1997), 5, https://comptroller.defense.gov/Portals/45/documents/cfs/fy1998/40_dfas-wcf-98.pdf.

number of legacy financial systems. All of this no doubt led to some problems providing services. Moreover, documentation sometimes did not get to the new locations or was not properly controlled once there. For example, an audit by the DoD inspector general found that, among the tens of thousands of contracts initially shipped to the new DFAS contract payment center in Columbus, Ohio, about 6 percent were incomplete, which no doubt led to some erroneous payments.⁸⁰ Finally, the creation of DFAS made the actual cost of finance and accounting more visible, prompting service concerns. In pre-DFAS days, large operating appropriations contained the costs to perform finance and accounting work; costs for finance and accounting could only be identified based on expert studies and estimates. By contrast, DFAS billed the services for all work performed, making the amounts and cost drivers obvious to all, which was one of the new agency's goals. However, some service leaders experienced sticker shock regarding costs they had always been paying but that had now become fully visible. Some in the services also felt they did not fully understand the sources for DFAS costs.

The creation of DFAS led to changes and unease among military personnel working in finance and accounting, especially in the Army and Air Force, which have military personnel dedicated to financial management. As it took on functions from the services, the new agency reduced the numbers of financial personnel in the military services. For example, the Army Finance Corps, a venerable organization with roots dating back to 1775, declined in size by about 50 percent after DFAS took over many of the corps' responsibilities. That led to talk about transitioning the Army Finance Corps to a civilian organization or even abolishing it altogether, causing consternation among its members.⁸¹ Wartime financial management needs posed another problem. Over time, the military personnel who remained in service financial organizations became less experienced in performing the finance and accounting tasks now done by DFAS but that they would have to perform during war. During conflicts, DFAS provided subject matter experts in noncombat areas, but military members still had to perform tasks they did not regularly do in peacetime. In response, the Air Force created a new program, the Top Dollar training and competition program, to train its military financial managers for war. During the Afghan and Iraq Wars, the Army established special training to prepare their financial managers for wartime duties. DFAS also provided military personnel serving in war zones with training, which continues today.

Senior DoD managers, including Comptroller Hamre, continued to provide strong support for DFAS, which is no doubt why the new organization survived. Secretary Perry, for example, stated in his February 1995 annual report that DFAS "represented a giant step forward" and had become "a pivotal agent for key financial management reforms."⁸² Senior DFAS leaders who visited military bases and installations during this period reported that some rank-and-file military personnel appreciated the service provided by DFAS. But for all the reasons noted above, and in general because the military

⁸⁰ Department of Defense Inspector General, *Audit Report*, 4–5.

⁸¹ Roland Arteaga, *The Mission and Role of the Army Finance Corps – 1995 and Beyond, Will There Be One?* (Carlisle, PA: U.S. Army War College, 1992), 4, <https://apps.dtic.mil/dtic/tr/fulltext/u2/a251193.pdf>.

⁸² William J. Perry, *Annual Report to the President and the Congress* (Washington, DC: DOD, 1995), 123, https://history.defense.gov/Portals/70/Documents/annual_reports/1995_DoD_AR.pdf?ver=2014-06-24-152712-813.

services prefer to control their own support activities, DFAS was the target of considerable criticism from service leaders. During the author's tenure as Air Force comptroller in the 1990s, one senior civilian employee on his staff told him in private that the Air Force had endured many of the same problems that DFAS was experiencing but tolerated those problems better when the Air Force owned finance and accounting. Regardless of motives, to many leaders in the military services in the 1990s, "DFAS" was a four-letter word.

Continued Streamlining

Despite concerns and criticisms, DFAS continued to streamline finance and accounting operations. Early in its history, the new organization instituted and gradually expanded a program of electronic commerce (EC) and electronic data interchange (EDI) to move data electronically rather than by shuffling paper.⁸³ DFAS partnered with acquisition and other experts to produce new systems to streamline its work. The Wide Area Workflow (WAWF) system, just one of many examples, allowed contractors to submit invoices and defense personnel to file receiving reports, all electronically.⁸⁴ Systems such as WAWF not only streamlined processing; they made it faster and more accurate. Other changes noted above, including electronic funds transfer and the travel and purchase card, helped further streamline DFAS operations. In 2000, DFAS established the employee/member self-service system, which allowed authorized individuals to accomplish financial transactions online. Soon rechristened with the more memorable name of myPay, this system has helped busy DFAS customers manage their pay while also reducing the paperwork DFAS has to process.

DFAS also continued streamlining its own organizational structure. By the early 2000s, DFAS had already begun using a single site to provide a few finance services for the entire DoD (for example, debt and claims payments). In 2005, Congress allowed the Pentagon to consolidate and close bases using expedited procedures, a process known as Base Realignment and Closure (BRAC). DFAS participated aggressively in the 2005 BRAC, closing one major center in Denver and a total of 20 other locations. These changes accelerated the trend toward providing multiple DoD organizations with services from a single DFAS site. Today, DFAS maintains just five large, enduring sites (Cleveland, Ohio; Columbus, Ohio; Indianapolis, Indiana; Limestone, Maine; and Rome, New York) plus five smaller locations in the United States and overseas.

Streamlining has continued in recent years. DFAS continues to work with the military services and defense agencies to help them install new accounting systems, known as enterprise resource planning systems. These systems, discussed above, should provide better financial information and tighten financial controls that will eventually help DoD achieve auditable financial statements. DFAS plays a major role in the department's extensive efforts to obtain auditable financial statements.

⁸³ Defense Finance and Accounting Service, *Working Capital Fund Report*, FY 1998, 9–10.

⁸⁴ "WAWF Information," Defense Finance and Accounting Service, n.d., <https://www.dfas.mil/contractorsvendors/irapt/wawf/info>.

Assessing the DFAS Reform

After about 30 years and innumerable changes, how is DFAS faring in terms of providing services and saving money? As noted above, the early years featured many customer concerns, some justified and others less so. Some Pentagon leaders continue to raise concerns today. For example, a 2019 GAO report noted that Army and Navy officials felt their departments lacked information about the types of costs included in DFAS bills and how those costs are allocated to customers. This lack of transparency, a concern since the creation of DFAS, makes it difficult for the services to manage their costs and prevents them from determining whether costs are equitably allocated and reflect usage.⁸⁵ Critics also fault the lack of flexibility at DFAS in responding to needed changes, such as changes senior leaders believed would speed progress toward auditable financial statements.⁸⁶ But other senior-level personnel believed DFAS had served them well. For example, during the author's tenure as DoD comptroller, DFAS helped by continuing to seek efficiencies and by performing extraordinary payroll and other critical financial tasks during the planning and execution of government shutdowns.

DFAS generally earns good marks from the rank-and-file personnel who use its services. Since 2001, the Office of Personnel Management (OPM) has independently surveyed DFAS customers to determine their levels of satisfaction. The 2020 survey analyzed responses from 13,000 customers drawn from various categories, including recipients of military and civilian pay, retirees and annuitants, customer service representatives, and contractor representatives. Compared with earlier surveys, the 2020 results for DFAS showed improvement in nine of nine areas surveyed, including knowledge, quality, reliability, timeliness, and courtesy. OPM also surveyed 87 other federal organizations, almost all performing support-type tasks though mostly not accounting and finance. Compared with surveys administered to these organizations from 2015 to 2020, DFAS scored above the median on all nine factors. Overall, 73 percent of DFAS customers who responded to the 2020 survey agreed or strongly agreed that DFAS provides good service, compared with a median score of 68 percent achieved by the 87 other organizations.⁸⁷

While meeting many customer needs, DFAS has achieved significant efficiencies. The decline in the size of its workforce provides one measure. DoD data collected in 1994 showed that DFAS took over about 28,000 financial management positions, including some military personnel but mostly civilians, with another 18,000 positions remaining in the services and agencies. The Army surrendered 75 percent of its financial managers, while the Air Force and Navy gave up 50 percent and 29 percent, respectively. These significant differences reflect different decisions about who does what. For example, compared to the Army, the Air Force and especially the Navy initially retained more

⁸⁵ Government Accountability Office, *Defense-Wide Working Capital Fund Agencies Apply Most Key Operating Principles but Should Improve Pricing Transparency*, GAO-20-65 (Washington, DC: 2019), 14, <https://www.gao.gov/assets/gao-20-65.pdf>. DFAS follow-up indicated that some of the lack of transparency stemmed from rules used by the working capital funds to allocate costs.

⁸⁶ Comments provided to the author in June 2021 by Mark Easton, former deputy chief financial officer at DoD.

⁸⁷ Steven Burnkrant (Lead Personnel Research Psychologist, Organizational Assessment, Office of Personnel Management), in discussion with the author, August 9, 2021.

responsibility for the computation and disbursement of travel entitlements.⁸⁸ By 2020, after about 30 years of operation, the total DFAS workforce amounted to slightly fewer than 12,000 personnel—a decline of 57 percent compared to where the service began in the early 1990s.⁸⁹

DFAS has saved enough over the past decade to pay for a Navy nuclear aircraft carrier or about two wings of Air Force F-35 aircraft.

Operating budgets provide another and more comprehensive measure of DFAS savings. As the new agency took over functions and personnel from the military services, DFAS operating budgets rose sharply in the early 1990s, peaking in FY 1994 at a level of \$2.98 billion (all dollar figures in this

paragraph are in FY 2020 dollars). By FY 2000, the DFAS operating budget had declined only modestly to \$2.71 billion. Over the next decade, however, as DFAS consolidated aggressively and achieved economies of scale, its operating budgets fell sharply to a level of \$1.85 billion and then declined at a more moderate pace to \$1.47 billion in FY 2020.⁹⁰ Based on these figures, by FY 2020, DFAS had reduced DoD costs by \$1.5 billion compared to costs in FY 1994—a reduction of 49 percent. To state these savings in terms of value to the military, DFAS has saved enough over the past decade to pay for a Navy nuclear aircraft carrier or about two wings of Air Force F-35 aircraft.

Do these savings simply reflect a reduction in demands for DoD accounting and finance or events that would have saved money even without DFAS? Total military and civilian personnel declined by 14 percent between 1994 and 2020, which reduced the workload associated with paying personnel. Initiatives such as electronic funds transfer and the purchase and travel cards reduced finance and accounting requirements and would have achieved some savings even without DFAS. On the other hand, between 1994 and 2020, inflation-adjusted levels of DoD funding increased by about 60 percent, including a 100 percent increase in the research and procurement appropriations that often require complex finance and accounting. Other factors increased demands levied on DFAS during this period, including the pursuit of auditable financial statements and involvement in the Afghan War. Perhaps most telling, the sharp drop in DFAS operating budgets from 2000 to 2010, a period when DFAS

⁸⁸ General Accounting Office, *An Overview of Finance and Accounting Activities in DoD*, NSIAD/AIMD-97-61 (Washington DC: 1997), 3, 10–11, <https://apps.dtic.mil/sti/pdfs/ADA344478.pdf>.

⁸⁹ Department of Defense, *Defense-Wide Fiscal Year 2021 Budget Estimates* (Washington, DC: 2020), 15, https://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2021/budget_justification/pdfs/06_Defense_Working_Capital_Fund/PB21_DWWCF_Operating_and_Capital_Budgets.pdf.

⁹⁰ The data come from four sources and the author's calculations: General Accounting Office, *An Overview of Finance and Accounting Activities in DOD*, 19; Edward G. Keating et. al., *Defense Working Capital Fund Pricing in the Defense Finance and Accounting Service* (Santa Monica, CA: RAND, 2015), 10, https://www.rand.org/content/dam/rand/pubs/research_reports/RR800/RR866/RAND_RR866.pdf; Department of Defense, *Defense-Wide Fiscal Year 2012 Budget Estimates* (Washington, DC: 2011), 12, <https://www.acqnotes.com/Attachments/2012%20Defense%20Working%20Capital%20Fund.pdf>; and Department of Defense, *Defense-Wide Fiscal Year 2021 Budget Estimates*, 14.

aggressively consolidated to achieve economies of scale, suggests that most of the savings occurred because of its creation and the resulting consolidations.

The creation of DFAS ranks among those DoD reforms that continue to provide many services effectively while also yielding substantial savings. Closing and realigning bases constitutes one of the largest cost-saving initiatives in DoD's history and

The history of the creation of DFAS also conveys an important lesson about major Pentagon reforms. They take time.

so provides a useful benchmark. Between 1988 and 1998, DoD implemented four rounds of base closures and realignments. Once fully implemented, the net annual savings for the first three rounds averaged about \$2.4 billion per round (all dollars in this paragraph are in FY 2020 dollars). DFAS savings are clearly less but still substantial, even by this measure. The large 2005 base closing round eventually saved about \$4.3 billion a year, much more than the creation of DFAS, but it also cost a stunning \$43 billion to implement. Moreover, savings due to the creation of DFAS could increase in future years, especially if the finance and accounting service and the military services can work together to improve the systems that funnel financial information to DFAS.

The history of the creation of DFAS also conveys an important lesson about major Pentagon reforms. They take time. Even though DFAS stood up in 1991, about 80 percent of its budgetary savings occurred during the latter 20 years of its roughly 30-year life—that is, after the year 2000. It took DFAS many years—and a fair number of tears—to consolidate and streamline defense finance and accounting, an effort that continues today. Defense leaders should think in terms of more than a decade when estimating the time required to realize full savings from major reforms.

4 | Budget Execution in War

The United States has spent a lot on wars. In FY 2020 dollars, costs have ranged from \$3 billion for the American Revolution to \$4.8 trillion for World War II, the United States’ most expensive war (see table).⁹¹ The Afghan and Iraq Wars rank as the longest in U.S. history but a distant second in terms of inflation-adjusted costs.

Budget Execution in War

- **Paying Troops**
- **Paying Vendors and Locals**
- **Accounting for War Costs**

Wars represent a key and unique part of the DoD mission, but they also pose special challenges for budget execution. Military personnel in the war zone must be paid while in combat, the military has to pay local vendors for goods and services where it is not practical to ship them to the war zone, and accounting for funds must continue even during active hostilities. Interviews with former military commanders strongly suggest that budget execution processes succeeded during the Afghan and Iraq Wars and provided adequate flexibility, but that has not always been the case.⁹² This section of the paper documents how budget execution processes evolved to better meet wartime financial needs.

Table 1: Costs of Selected U.S. Wars

	<i>Current Dollars</i>	<i>FY 2020 Dollars</i>
American Revolution	\$0.1B	\$3B
Civil War (Union + Confederacy)	\$4B	\$93B
World War I	\$20B	\$387B
World War II	\$296B	\$4,769B
Vietnam	\$111B	\$858B
Persian Gulf	\$61B	\$119B
Afghanistan and Iraq	\$1,820B	\$2,190B

Source: Stephen Daggett, *Costs of Major U.S. Wars*, CRS Report No. RS22926 (Washington, DC: Congressional Research Service, June 2010), <https://sgp.fas.org/crs/natsec/RS22926.pdf>.

⁹¹ Except for the Afghan and Iraq Wars, see Stephen Daggett, *Costs of Major U.S. Wars*, CRS Report No. RS22926 (Washington, DC: Congressional Research Service, June 2010), 1-2, <https://fas.org/sgp/crs/natsec/RS22926.pdf>. The author calculated the cost of the Afghan and Iraq Wars through FY 2021 based on data in the budget justifications and overviews displayed on the DoD Comptroller website.

⁹² See section below on “Assessing Budget Execution—Strengths” for a description of these interviews.

Paying Troops

On June 16, 1775, two days after passing legislation establishing the Army, the Second Continental Congress passed a resolution establishing the paymaster general. Revolutionary-era troops were to be paid monthly at rates that varied by grade (a private earned \$6 per month during the revolution, equivalent to about \$170 a month in FY 2020 dollars).⁹³ But the war created major pay problems. Paydays were irregular because money was sometimes not available. Despite a policy that mandated varying pay by grades, units commonly pooled available funds and distributed them equally among all troops. Worst of all, the colonial Army had internal competitors during the American Revolution. State militias sometimes paid more, and they paid in hard currency rather than the notes used to pay colonial Army troops.

The Civil War saw some advances in troop pay—notably the creation of allotments allowing pay to be sent directly home to family members and increases in the amount of pay (Union privates brought in \$13 a month, which translates to about \$250 in FY 2020 dollars). But problems persisted. Pay was irregular, especially at distant frontier locations, though by the end of the war the Union paymaster general reported that all mustered-out troops had been paid in full. Some of the Civil War problems did get resolved before subsequent wars. Just before the beginning of the twentieth century, during the Spanish American War, wiring money had solved many of the problems associated with payments at distant locations.⁹⁴

During World War II, military personnel earned more (a private now made \$50 a month, equivalent to \$750 in FY 2020 dollars). World War II also ushered in a more complex pay system and, with it, new problems. Higher salaries led to more allotments for family members, insurance, and war bonds. New types of pay for overseas duty and special pays for flight duty and parachuting further complicated the system. These more complex payments had to be calculated and verified, sometimes in difficult wartime environments where pay clerks lacked access to devices such as electronic adding machines and even, in some cases, access to past pay records.⁹⁵

World War II also brought changes in the currency used to pay the troops in an effort to avoid black market problems. Particularly in liberated or newly occupied countries, personnel received specially printed notes known as allied military currency (AMC). AMC came in francs, kroner, lire, marks, schillings, and yen, depending on the country of use. Each currency had a code name to help preserve secrecy during the printing process, including colorful names such as Wild Dog, Husky, and Toy Horse. AMC solved black market problems but created others. While the United States printed most AMC, other allies printed some. The Soviets, for example, insisted on printing some of the Wild Dog marks because they intended to occupy much of Germany after the war. But the Soviets printed too much of

⁹³ Logan Nye, “This is how much US troops were paid in every American war,” We Are the Mighty, December 4, 2018, <https://www.wearethemighty.com/articles/this-is-how-much-troops-were-paid-in-every-major-american-war/>.

⁹⁴ William N. Andersen, *Future Army Finance Corps' Structure at the Department of the Army Level* (Carlisle, PA: U.S. Army War College, 1996), 4–8, <https://apps.dtic.mil/dtic/tr/fulltext/u2/a309368.pdf>.

⁹⁵ *Ibid.*, 11–13.

the mark currency, which fueled inflation. Counterfeiting also caused problems, especially for larger notes.⁹⁶

DoD had the Bureau of Printing and Engraving create colorful certificates denominated from five U.S. cents to 10 dollars (20 dollar certificates were added after 1968) for paying troops stationed in overseas countries (see Figure 2). (Even during the Korean and Vietnam Wars, however, sailors on ships continued to be paid with U.S. cash, frequently with \$2 bills to reduce the costs of transporting currency.⁹⁷) DoD issued these MPCs, which were not valid for use in the United States but were required for any purchases at U.S. bases overseas. If troops wanted to make overseas purchases on the local economy, they were supposed to exchange their MPCs for local currency. However, primarily through the black market, MPCs often gradually made its way into local economies. If black market use rose too much, the military executed an unannounced C-day (change day). On that day, troops were confined to their bases so they could not notify local vendors and were required to exchange their old-series certificates for a new series. After a C-day, old-series certificates became worthless. Military payment certificates helped stem black market activities and avoided exchange rate problems. They experienced their greatest use during the Vietnam War (when a private with at least four months of service and no allotments could pocket certificates equal to \$83 a month, or about \$730 in FY 2020 dollars).⁹⁸ DoD phased out MPCs after the end of the Vietnam War.

Figure 2: Vietnam-era Military Payment Certificate



Source: Transferred from en.wikipedia to Commons. Transfer was stated to be made by User:jonny-mt. Image from Coins and banknotes of Vietnam and French Indochina: MPC Series 692 (1970-1973).
https://commons.wikimedia.org/wiki/File:1_Dollar_Series_692_MPC.jpg.

⁹⁶ C. Frederick Schwan and Joseph E. Boling, *World War II Remembered: history in your hands—a numismatic study* (Port Clinton, Ohio: BNR Press, 1995), 274, 276–290.

⁹⁷ “Armed Forces Comptroller, 10.

⁹⁸ Schwan and Boling, *World War II Remembered*, 402–403.

Today, technology and efforts by finance personnel have finally permitted DoD to resolve most wartime pay problems, especially late and inaccurate pay . . .

In 1949, in response to troop pay problems during World War II, the military introduced the Military Pay Records system, a paper document that contained all the details of a soldier's pay that was hand-carried in a cardboard tube when troops moved from station to station. Unfortunately,

the sometimes bulky documents caused problems during the Korean War. Units moved quickly and records did not always keep up. That led the Army to conduct research and then design and shift to the Military Pay Voucher system in 1959. Unit personnel offices began maintaining basic pay records, and soldiers received short paper vouchers explaining their pay. This system, while a major improvement compared to bulky individual pay records, still required substantial manual calculations that led to errors. In 1964, the Army introduced an automated system that came to be known as the Centralized Automated Military Pay System (CAMPS). Now field units entered pay details on punched cards, which were transmitted electronically to pay centers that performed calculations and sent back details on payments to be made. In 1966, as the Vietnam War grew in size, DoD required the services to use yet another new pay system, known as the Joint Uniform Military Pay System (JUMPS), and the 1980s saw further improvements in JUMPS. But these systems were still not readily deployable during wars, which sometimes meant that units in forward war areas had to mail in punched cards and wait for results.⁹⁹

In 1999, Congress mandated that federal agencies use electronic funds transfers (see discussion above). All military and civilian personnel had to have bank accounts that could accept the transfers, and checks and cash largely disappeared from paydays. This shift and the availability of electronic communications from war zones back to the United States reduced errors and improved the timeliness of wartime payments during the Afghan and Iraq Wars. DFAS made further improvements by gradually deploying electronic systems that permitted military members to manage their payments online. Troops not only earned a lot more during the Afghanistan and Iraq Wars (a private with at least four months experience pulled down \$1,151 a month, equivalent to \$1,650 in today's dollars); they also were paid on time and with fewer errors.

Even during the most recent U.S. wars, however, some old problems reared their ugly heads. For example, DoD airlifted seriously wounded troops rapidly from war zones in Iraq and Afghanistan to U.S. hospitals in Germany and then to hospitals in the United States. DFAS did not always receive updates on changes in a troop's location and status, even though the changes could affect a member's pay. Family members of the wounded, who were already traumatized, sometimes faced the added worry of late or incorrect paychecks. DFAS responded to this poignant problem by stationing specially trained employees at hospitals with instructions to track and quickly record changes in the

⁹⁹ Andersen, *Future Army Finance Corps' Structure*, 12–17.

status of seriously wounded troops. By 2007, as many as 81 DFAS personnel performed this duty, and their efforts coupled with new systems largely resolved the problems. The author, who oversaw DFAS activities while serving as DoD comptroller, recalls feeling proud of the organization's efforts to help seriously wounded U.S. troops during the Afghan and Iraq Wars.

Today, technology and efforts by finance personnel have finally permitted DoD to resolve most wartime pay problems, especially late and inaccurate pay, that have plagued troops in many past U.S. wars.

Paying Vendors and Locals

Defense financial managers must not only pay the troops during wars but also finance the purchase of needed supplies and support from local vendors in the war zone. Where possible, the military ships war supplies from the United States to war zones or pays U.S. contractors to supply these items. But the military sometimes buys supplies from local vendors if these goods and services cannot be shipped from the United States in a timely or cost-effective fashion. Locally purchased items might include perishable edibles (such as fresh fruits and vegetables), bulky construction supplies (sand, cement), medical needs (gauze, bandages), and administrative supplies. Sometimes financial managers also need to pay war zone locals to reimburse for damages during combat and to encourage their support for the war effort. During the Gulf War, for example, the Commander's Emergency Response Program (CERP) reimbursed Iraqis and Afghans for damage caused by wartime operations and also provided funds to build schools and roads and other services—all steps designed to win the hearts and minds of the local population. Efforts such as CERP led General David Petraeus, a former commander during both the Afghan and Iraq Wars, to state that “Money is my most important ammunition in this war.”¹⁰⁰

Payments to vendors and locals have also been important in earlier wars. During World War II, for example, U.S. forces in Australia depended on the local economy for most of its logistical support and, to satisfy locals, sought to pay invoices quickly. In England, the United States hired locals to perform aircraft maintenance, working through contractors so that persons with this scarce skill could be paid high wages. In some cases, these mechanics could earn more than General Eisenhower.¹⁰¹ Vendors and locals have remained important in more recent wars. After Iraq occupied Kuwait in 1990, the United States and its allies put troops in place rapidly to push the Iraqis out of Kuwait. Sometimes troops arrived before all needed supplies had been delivered. To meet this challenge, the military sent teams of contracting officers, accompanied by financial managers and lawyers, to purchase needed goods and services from local vendors. These teams helped make the Gulf War a success. As then

¹⁰⁰ Emily Gilbert, “Money as a “weapons system” and the entrepreneurial way of war,” *Critical Military Studies* 1, no. 3 (2015), <https://www.tandfonline.com/doi/full/10.1080/23337486.2015.1063810>.

¹⁰¹ Walter Rundell, Jr., *Military Money: A Fiscal History of the U.S. Army Overseas in World War II* (College Station: Texas A&M University Press, 1980), 158.

Major General William (Gus) Pagonis, director of U.S. logistics during the Gulf War, stated: “I can attest that the rapid buildup just could not have been accomplished without the contribution of the (Army) Finance Corps, particularly in supporting procurement operations.”¹⁰² In the mid and late 1990s, similar teams infused millions of dollars in cash to support vendor operations during the Bosnia conflict.

In contrast to its effects on paying troops, technology has only partially solved the problems associated with paying vendors during wars because some of those payments still have to be made in cash. Cash remains king for payments to vendors in the early days of a conflict. As in-country banking facilities become available, and if U.S. financial institutions deem them acceptable, more payments can be made using means other than cash. But, at least for the foreseeable future, cash will remain a part of wartime vendor operations. Even by FY 2020, toward the end of the Afghan War, DoD held \$767 million in cash and investments outside of the Treasury Department, much of which would no doubt be used to meet wartime needs.

DoD also sometimes made extraordinary war-related payments in cash. In 2007, as Iraq moved toward becoming a sovereign government, the United States airlifted more than \$4 billion in U.S. cash to Iraq on pallets weighing 363 tons, the largest single set of cash shipments ever made by the U.S. Federal Reserve. The Iraq government requested the cash, drawn from sources such as Iraqi oil exports and assets frozen during the Saddam Hussein regime, so that it could pay bills during its first few months of sovereignty.¹⁰³

Despite cash payments and the sometimes stressful wartime environment, wartime financial managers must ensure that they comply with financial laws and regulations. As Army contract manuals governing battlefield operations clearly state, vendors and locals must be legal with regard to purpose (that is, complying with the requirements of enacted appropriations), time (used in the correct fiscal year), and amount (not exceeding appropriated amounts).¹⁰⁴

Accounting for War Costs

Financial managers must account for wartime funding in order to know the costs of war. The Pentagon also needs accounting data to ensure compliance with fiscal laws and to help plan future war budgets. But accurate accounting data can be difficult to gather in a war zone, especially if tactical considerations limit the number of financial personnel in the zone.

¹⁰² Arteaga, *The Mission and Role of the Army Finance Corps*, 10.

¹⁰³ Jeremy Pelofsky, “U.S. sent pallets of cash to Baghdad,” Reuters, February 6, 2007, <https://www.reuters.com/article/us-iraq-usa-cash/u-s-sent-pallets-of-cash-to-baghdad-idUSN0631295120070207>.

¹⁰⁴ U.S. Army, *Contracting Support on the Battlefield*, FM 100-10-2 (Washington, DC: 1999), 3–10, https://www.acq.osd.mil/dpap/ccap/cc/jcchb/Files/FormsPubsRegs/Pubs/USAFM100_10_2.pdf.

The Vietnam War illustrates these accounting challenges. Early in that conflict, the Army chief of staff declared that the army of Vietnam would be relieved of as much administrative responsibility as possible. Also, to speed deliveries, the Army permitted in-country personnel to buy goods and services from vendors and send bills to the Army financial managers later. The Army Materiel Command even sent “push packages” of supplies to Vietnam based on engineering estimates rather than requests from users. In a 1965 memo, Secretary of Defense Robert McNamara (who served as secretary from 1961 to 1968) added to wartime financial problems by stating that funding for Vietnam would be unlimited.¹⁰⁵

Despite these formidable challenges, Congress and the Army needed to know what the war was costing. The Army established an accounting facility in Okinawa, outside of the war zone but much closer to it than stateside facilities. The service decided to use a stock fund (today known as a working capital fund) to finance goods and services for Vietnam. Normally a stock fund operates like a private business—it has a corpus of capital that it uses to buy goods and services, which are then sold to users who reimburse the stock fund using appropriated funds. But problems with this particular stock fund developed quickly. Personnel levels increased rapidly, but financial managers did not know when

During the Afghan and Iraq Wars, accounting for the use of funds gradually came to rely more on automation and stateside facilities.

personnel would arrive and in what numbers. With little way to forecast current and future needs and little incentive to hold down costs because of McNamara’s blank-check promise, the situation got out of hand. The stock fund’s cash levels fell below zero at times, which constituted a violation of laws in effect at the time.¹⁰⁶

After a review in 1966, the Army decided to move Vietnam accounting efforts to Hawaii, where it maintained a major headquarters, and establish what came to be known as the Centralized Financial Management Agency (CFMA). The CFMA abandoned the stock fund approach and began financing goods and services using appropriated funds. Computer programs were improved and other changes were made. A later review concluded that the creation of the CFMA represented the best decision the Army made regarding accounting for the Vietnam War. But problems persisted, especially with reimbursements. In Vietnam, the Army provided goods and services to the other military services, foreign allies, and even to some private organizations such as the Red Cross. These organizations had to reimburse the Army for what they received. But reimbursement paperwork piled up at the CFMA, and the system did not work well. Some of these problems persisted into the 1970s and ultimately ended only when the war ended.¹⁰⁷

¹⁰⁵ Leonard B. Taylor, *Financial Management of the Vietnam Conflict, 1962-1972* (Washington, DC: Department of the Army, 1991 [written in the early 1970s]), 44–46, https://history.army.mil/html/books/090/90-13/CMH_Pub_90-13.pdf.

¹⁰⁶ Ibid.

¹⁰⁷ Ibid., 46–49, 60, 72–73, 78, 85–86.

In many respects, accounting was easier during World War II than during the Vietnam War. Units received virtually unlimited funds in World War II, as in Vietnam, but most World War II funding came as a lump sum with no designation as to appropriation, sub-appropriation, or project. As a result, few budget execution problems occurred. Finance personnel did have to report how money was spent by appropriation, and finance or external personnel conducted regular audits.¹⁰⁸ Though nothing like the flexibility available during World War II, DoD received modest added funding flexibility right after 9/11 when Congress created the Defense Emergency Response Fund (DERF). The president could determine how to utilize some DERF funds during the year of execution, though DoD had to request congressional approval after the president had provided direction. Soon, however, funding for the Afghan and Iraq Wars returned to use of funds only after DoD had submitted a specific budget the year before and Congress had approved.

During the Afghan and Iraq Wars, accounting for use of funds gradually came to rely more on automation and stateside facilities. Early in the Iraq War, the Army still used spreadsheets created in the war zones to reconcile costs, leading to what some who served there termed “spreadsheet hell.” Boxes of paper records from the early days of the Iraq War were sent back to Shaw Air Force Base where they were used to reconcile questionable cash payments. DFAS helped by assigning finance personnel to these war zones (as many as 53 persons were assigned). Gradually, the Army automated its accounting for these wars, for example, by making more use of its enterprise resource planning system. Data on vendor payments made in the war zones were sent back to the DFAS location in Rome, New York, for verification and input into appropriate service accounting systems, as was other war-related accounting information. As with paying troops, technology and better communications helped DoD solve many of the problems that plagued the Vietnam accounting effort.

¹⁰⁸ Rundell, *Military Money*, 72, 81.

5 | Budget Execution under Other Unusual Circumstances

Wars pose exceptional challenges for budget execution. But other unusual circumstances—including late appropriations, sequestration, and government shutdowns—also create challenges.

Other Unusual Circumstances

- **Late Appropriations**
- **Sequestration**
- **Government Shutdowns**

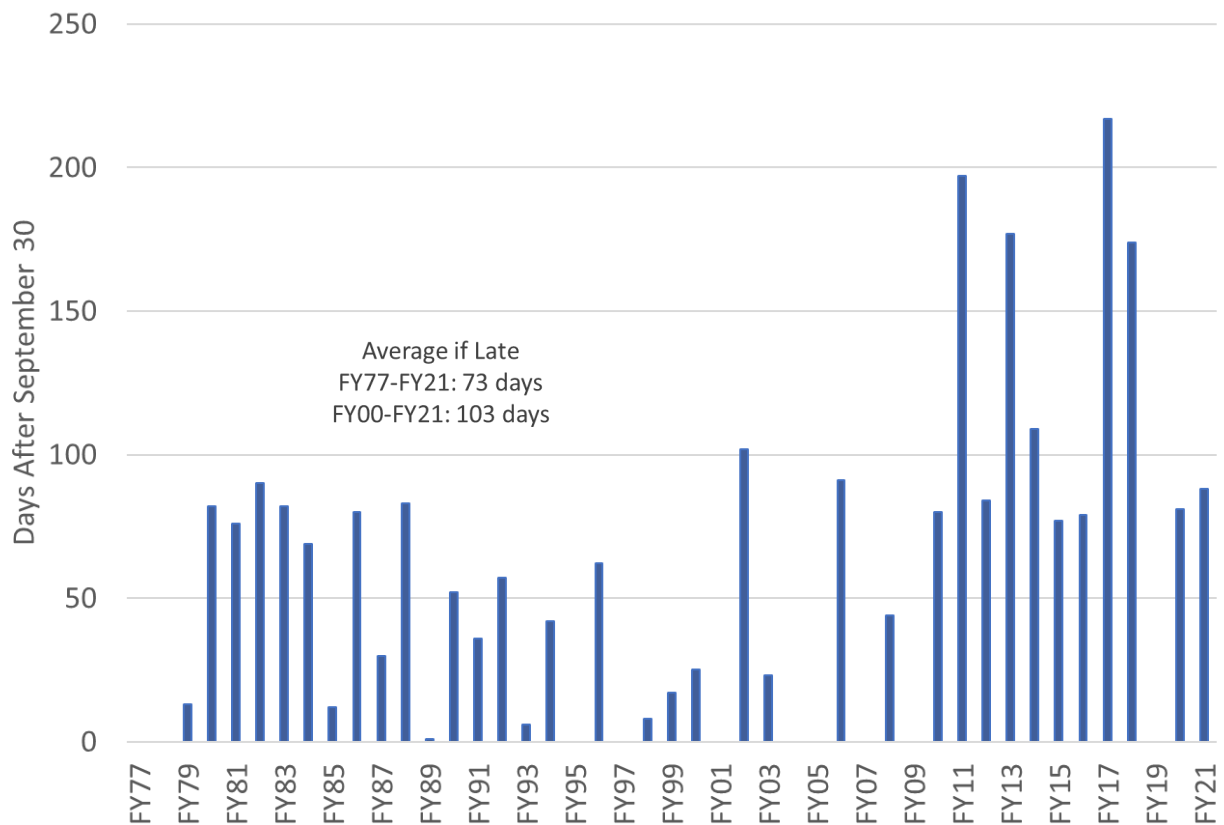
Late Appropriations

Late appropriations are nothing new to DoD managers. In 1825, the secretary of the Navy complained that congressional appropriations often occurred two to five months late.¹⁰⁹ Fast forward to 1974 when Congress created new procedures for reviewing and passing budgets, including target dates to help ensure on-time appropriations. Then in 1976, Congress changed the U.S. fiscal year so that it ended on September 30 instead of June 30, in large part to help create on-time appropriations. In most years, these efforts have not succeeded in producing on-time budgets. Between FY 1977, the first full year when the fiscal year ended on September 30, up to FY 2021, 45 years of budgets have been approved. During those years, Congress and the president enacted DoD budgets on time in only 10 years (see Figure 3). Late budgets became available an average of 73 days after the beginning of the fiscal year. Lack of timely budgets has become a much greater problem in recent years, as Figure 3 clearly shows. For the 12 budgets completed from FY 2010 to FY 2021, Congress and the president agreed on DoD budgets on time only once, with late budgets enacted an average of 124 days after the new fiscal year began.

When DoD budgets are enacted after the beginning of the fiscal year, Congress and the president must agree to a special appropriation bill, known as a continuing resolution (CR), to avoid partially shutting down the DoD due to the absence of an appropriation. Typically, CRs provide appropriations for a short period of time, usually a month or two but sometimes for only a few days, and usually set the available obligating authority in each DoD appropriation at a level equal to an appropriate period in the previous fiscal year. CR provisions, known as anomalies, sometimes provide more or less obligating authority for certain programs and occasionally impose special limitations or provide exemptions that permit higher funding.

¹⁰⁹ Fisher, *Presidential Spending Power*, 103.

Figure 3: Late Defense Appropriations, FY 1977 - FY 2021



Source: Barbara Salazar Torreon et al., *Defense Authorization and Appropriations Bills: FY1961-FY2021*, CRS Report No. 98-756 (Washington, DC: Congressional Research Service, July 2021), <https://sgp.fas.org/crs/natsec/98-756.pdf>.

Even short CRs cause problems. They add to workload because they require special apportionments followed by special distributions of funds, which must be carefully monitored to ensure that they abide by the CR provisions, including any anomalies. CRs usually prohibit the start of any new acquisition or construction programs, and even ongoing acquisition and construction programs may be delayed because of uncertainty about future funding. As a result of these delays, contracting professionals have less time to do their jobs, which can result in contracts that are less well crafted. Because typical CRs set funding levels for each appropriation at last year’s levels, they can leave dollars in the wrong appropriations—for example, a planned increase in procurement might not be supported by a CR that sets procurement funding at last year’s level. Worse yet, Congress usually does not allow DoD to reprogram funds while under a CR because the department lacks an enacted budget with the details necessary to assess reprogramming actions. For all these reasons, and because of uncertainty about what funding will ultimately be made available, late appropriations and their accompanying CRs reduce the DoD’s budgetary effectiveness.

In short, late budgets and the resulting CRs are a bad way to finance DoD activities, and long CRs are especially harmful.

While all CRs pose problems, lengthy ones pose significantly greater problems. Over the years, DoD has learned not to plan for major contract renewals or large financial transactions during the first quarter of the fiscal year, when CRs have become the norm.

Stated more whimsically, DoD knows

how to hold its fiscal breath for a few months at the beginning of a fiscal year. But CRs that extend beyond December 31 become increasingly more problematic and, unfortunately, they have also become more common in recent years. In the 12 budgets enacted between FY 2010 and FY 2021, Congress and the president have failed to agree on a budget by December 31 in five years, with delays in those years averaging 175 days, or nearly until April. The dubious distinction of the longest CR since FY 1977 belongs to FY 2017, when Congress and the president could not agree on a budget until May 5, well beyond the halfway point for the fiscal year. Exceptionally long CRs that leave money in the wrong appropriations can cause serious execution problems. Long CRs also leave little time for creating good contracts and are especially problematic for the operating accounts, which contain funds that must be all obligated in the fiscal year of their appropriation. The lack of reprogramming authority and general budgetary uncertainty can seriously harm programs. In short, late budgets and the resulting CRs are a bad way to finance DoD activities, and long CRs are especially harmful.

Sequestration

Sequestration constitutes another unusual circumstance that can strain budget execution. The procedures for sequestration—that is, automatic budget cuts—date back to 1985. In that year, concerns over the size of the federal deficit led Congress and the president to enact the Balanced Budget and Emergency Deficit Control Act—often called the Gramm-Rudman-Hollings (GRH) legislation because of the three senators who authored it. The law set annual ceilings on the federal deficit, and if spending and tax decisions led to a higher deficit, selected categories of federal spending had to be cut to bring the deficit back down to the ceiling level. During debate over the GRH legislation, Senator Phil Gramm made clear that the bill sought to pressure Congress and the president to reach a budget deal that reduced deficits rather than reducing them through sequestration.¹¹⁰ However, in FY 1986, the year the new law passed, a sequestration occurred. Based

¹¹⁰ G. William Hoagland and Loren Adler, “Origins of the Sequester,” Bipartisan Policy Center, February 27, 2013, <https://bipartisanpolicy.org/blog/origins-sequester/>.

on a series of complex calculations, that sequestration resulted in a cut of about 5 percent in the roughly 40 percent of the defense budgetary disbursements subject to sequestration.¹¹¹

In the years after FY 1986, Congress and the president reached deals to avoid sequestration by a combination of cutting federal spending and relaxing the deficit targets. But the legislative deals resulted in sharp real cuts in defense funding. A senior financial leader serving in DoD at the time recalls that the cuts led to considerable budgetary turmoil, including the need to prepare multiple budgets.¹¹² The abrupt cuts also contributed to the failure of a DoD experiment with biennial budgeting mandated by the FY 1986 defense authorization bill.¹¹³

In FY 1990, the economy sputtered and deficits soared. Initial estimates showed that federal budget authority subject to sequestration would have to be cut by about 50 percent to meet the GRH targets—clearly an untenable outcome. Congress and the president reached a deal to avoid sequestration that year and also enacted a new law that placed ceilings on budget authority rather than on the deficit, in order to minimize reliance on uncertain deficit forecasts and to avoid large cuts in appropriations that generate disbursements slowly.¹¹⁴ Then, as the U.S. economy strengthened in the 1990s and federal deficits turned into surpluses, the GRH legislation faded into history. But the law remained on the books.

In 2011, the GRH sequestration procedures roared back to life. Faced with a need to increase the ceiling on the federal debt, but unable to reach a deal on funding cuts that would garner votes for the debt increase, Congress and the president agreed to the Budget Control Act of 2011, which became law on August 2, 2011. The law set legally binding ceilings on budget authority, with one ceiling for national security and another for non-defense activities. If Congress and the president agreed to spending that exceeded the ceilings, then a sequestration based on the GRH rules would take place.¹¹⁵ As in 1985, the threat of sequestration sought to pressure Congress and the president to make a deal rather than imposing automatic budget cuts. Indeed, during the final presidential debate in 2012, President Obama flatly stated that a sequestration would not happen.¹¹⁶

But as FY 2013 began in the fall of 2012, Congress and the president struggled to reach a budget agreement. Even though DoD faced large budget cuts if sequestration remained in effect, cuts that could amount to \$55 billion in one year, the department decided not to cut back funding in early FY

¹¹¹ Congressional Budget Office and Office of Management and Budget, *Sequestration Report for Fiscal Year 1986: A Summary* (Washington, DC: CBO and OMB, 1986), 6, 16, <https://www.cbo.gov/sites/default/files/99th-congress-1985-1986/reports/86doc02b0.pdf>.

¹¹² David S.C. Chu, written communication to author, December 2020. Dr. Chu served as director of the Program Analysis and Evaluation office from 1983 to 1991 and later served as undersecretary of defense for Personnel and Readiness.

¹¹³ Hale, *Financing the Fight*, 18–19.

¹¹⁴ Hoagland and Adler, “Origins of the Sequester.”

¹¹⁵ Todd Harrison, “What Has the Budget Control Act of 2011 Meant for Defense?,” CSIS, *Critical Questions*, August 1, 2016, <https://www.csis.org/analysis/what-has-budget-control-act-2011-meant-defense>.

¹¹⁶ Emily Cadei, “Barack Obama Says Sequester ‘Will Not Happen’, Hits Back on Military Spending Attacks,” Roll Call, October 23, 2012, <https://www.rollcall.com/2012/10/23/barack-obama-says-sequestration-will-not-happen-hits-back-on-military-spending-attacks/>.

2013, reflecting both the president's statement about sequestration not happening and a decision to wait for a budget deal rather than "self sequestering," a phrase often used by DoD leaders at the time.¹¹⁷ Finally, on New Year's Eve of 2012, Congress reached a budget agreement, which the president signed on January 2. But the deal included a sequester cut that took effect on March 1, 2013.

The sequestration amount for DoD had been reduced to \$37 billion but still equated to a cut of about 7 percent in affected accounts. Under the GRH rules, the cut had to be applied in equal percentage terms to thousands of line items in the DoD budget (known as programs, projects, and activities). Moreover, important restrictions and decisions made this sequester much worse for certain parts of the DoD budget. The 7 percent cut applied to wartime funding in the Overseas Contingency Operations account, which Pentagon leaders strongly believed had to be protected by moving money from other activities into wartime budgets to offset the sequester. The author, who served as DoD comptroller during this period, personally spoke to key wartime commanders to ensure that this decision was carried out. While the right thing to do, the decision increased sequester cuts in non-war activities and affected the Army most heavily because it had the largest share of wartime funding. DoD also decided to seek congressional authority to protect funding in a few high-priority commitments such as homeland security activities, the nuclear deterrent, and special operations forces. In addition, the president used his authority under the 1985 GRH law to exempt military personnel funding from sequestration because rapid cuts in military personnel spending simply cannot be made in any reasonable fashion, but the GRH law mandated that foregone military personnel savings had to be made up by larger cuts in other spending categories. Finally, because of when the decision was made and the timing of the sequester, most of the funding cuts took place during the second half of FY 2013. The bottom line: during the second half of fiscal year 2013, DoD faced cuts of about 30 percent in its day-to-day operating funds, and the Army faced an even higher percentage reduction.¹¹⁸

Shortly after January 1, when the size of the cuts became known, DoD began cutting back on 2013 spending by canceling all non-mission-essential travel, freezing civilian hiring, and halting non-emergency facilities maintenance. The department also proposed aggressive reprogramming actions to further reduce acquisition funding in order to move money into readiness accounts, many of which were eventually accepted by Congress, though not before the DoD comptroller experienced some restless nights. But even these actions were not enough to ensure that DoD met legally binding ceilings, and the services had to reduce training. The Air Force stopped or reduced training for one or more months at 27 of its 62 operational squadrons, and the Army canceled key training at its National Training Center for 7 of the 14 brigade combat teams originally scheduled to attend. DoD also had to impose unpaid furloughs on 640,000 of its civilian employees, about 85 percent of the workforce. Originally planned for 22 days, DoD eventually halted furloughs after 6 days because of favorable

¹¹⁷ Center for Strategic and Budgetary Assessments, "Report: Ashton Carter Memo Says Not to Assume Sequestration Will Happen," October 2, 2012, <https://csbaonline.org/about/news/report-ashton-carter-memo-says-not-to-assume-sequestration-will-happen>.

¹¹⁸ Robert Hale, *Budgetary turmoil at the Department of Defense from 2010 to 2014: a personal and professional journey* (Washington, DC: Brookings Institution, August 2015), 2–5, https://www.brookings.edu/wp-content/uploads/2016/06/DOD_budgetary_turmoil_final.pdf.

actions by Congress on the FY 2013 budget and the savings realized from other cutbacks.¹¹⁹ In the end, the 2013 sequestration lowered military readiness, which could have been critical had military action been required during this period. Sequestration also meant that civilian employees never got paid for the furlough workdays.

Senior DoD leaders sometimes asked the author whether DoD had overreacted to a budget cut of 7 percent. The author reminded these leaders that, because of the reasons noted above, DoD faced cuts of about 30 percent for the second half of FY 2013. The author also noted that during his roughly 40 years working in and around defense budgets, he had never seen the military services choose to stop training. Training is fundamental to military life, and the decision to cut back on training underscored the services' struggles to meet the sequester targets.

Financial managers can hope that an abrupt and substantial sequestration never happens again. But significant sequestrations have happened twice since 1985, and hope is not a plan. If they ever again face sequestration, financial managers need to do all they can to spread its effects over an entire fiscal year and not over just part of the year. They also need to understand fully the sometimes arcane sequester procedures so that they can explain them to leaders and employees and, in that way, help bring those service and agency leaders together in order to craft actions to respond to the sequestration while minimizing adverse effects on military capability.

Government Shutdowns

If DoD no longer has an enacted appropriation, whether a normal appropriation or a continuing resolution, then the department must shut down many of its activities. Shutdowns can have devastating effects on budget execution and the military capability it supports.

Unfortunately, government shutdowns have not been rare. Since FY 1977, the government has shut down 21 times, including 10 shutdowns that lasted more than three full days. The FY 2020 shutdown lasted 35 days, making it the longest government shutdown since FY 1977. DoD escaped any direct effects from the FY 2020 event because the department had a signed appropriation bill before it began, but DoD suffered adverse effects during many of the other shutdowns.¹²⁰

Potential government shutdowns require substantial advance planning. Amendments to the ADA passed in 1950 permit federal agencies to obligate funds in the absence of an appropriation but only for activities related to the preservation of life and the safety of property. DoD commanders and managers must identify so-called continuing activities that are permitted to go forward in the event of a shutdown, based on guidance approved by the Office of Management and Budget and issued by

¹¹⁹ *Ibid.*, 5–8.

¹²⁰ Clinton T. Brass et al., *Shutdown of the Federal Government: Causes, Processes, and Effects*, CRS Report No. RL34680 (Washington, DC: Congressional Research Service, updated 2018), 3–4, <https://fas.org/sgp/crs/misc/RL34680.pdf>.

DoD. Because they must be paid by law, all military personnel continue to work during a shutdown. But commanders and managers have to determine, by name, which civilian employees need to work to support continuing activities and then send letters to all other civilians informing them that, in the event of a shutdown, they will be placed on unpaid furloughs. Furloughed employees cannot do any work, including by phone or email, because of nineteenth century and later laws (noted above) that prohibit the government from accepting voluntary services. Contractors can continue to work if funds have been obligated to cover their work before the shutdown. But new contracts cannot begin except for those in support of continuing activities, and even if funded before the shutdown, contractors may not be able to work if government employees cannot be available to provide needed supervision. Shutdown planning also features a parade of close-call decisions, including, for example, when to bring home DoD personnel on temporary travel because of missions or schooling, what to do about ceremonies, including military funerals, and whether to continue academy athletics. Finally, while funds can be obligated for activities needed to preserve life and the safety of property, no disbursements of any kind can be made until Congress and the president have agreed on

Since FY 1977, the government has shut down 21 times, including 10 shutdowns that lasted more than three full days.

appropriation legislation, which means that military and civilian payrolls and some contractor payments cannot be issued until the shutdown has ended unless a specific exception is passed in law.

The government shutdown in FY 2014, which lasted for 16 days, from October 1–16, illustrates the effects of a lengthy shutdown. First, like many shutdowns, this one had little to do with funding for DoD or other federal agencies. In 2013, Republicans in Congress insisted on defunding the Affordable Care Act (better known as Obamacare), while the president and most Democrats in Congress strongly opposed defunding. On October 1, with no budget agreement and no appropriation in sight, DoD began to shut down activities other than those related to safety and preservation of life. For defense, these exceptions included all named military operations and anyone who worked in support of those operations. About 350,000 DoD civilians came to work on October 1 to shut down their activities but then headed home on a furlough that came close on the heels of the sequestration furlough imposed just a few months earlier. That same day Congress passed and the president signed the Pay Our Military Act, an appropriations bill that permitted DoD to pay its military and civilian personnel and some contractors even during the shutdown. But the hastily-drafted law contained vague wording, and DoD lawyers and managers spent most of the first week of the shutdown creating a legal case that finally permitted most of DoD's furloughed civilian employees to return after just seven days of furloughs, though the shutdown continued for another nine days. Even with most employees back at work, the shutdown disrupted DoD activities. Maintenance backlogs at depots grew, and there is anecdotal evidence that some skilled technicians left DoD depots because of the budget uncertainty. Testing ranges could not meet schedules, which delayed some weapon programs. Discretionary medical care was delayed. DoD wasted about \$400 million of public funds because the department eventually was allowed to pay its furloughed civilians but had to prohibit them from working while on

furlough. Worst of all, civilian employees forced onto furlough, many of whom had experienced the sequester furlough just a month or so before, must surely have been left wondering if they were still valued DoD employees.¹²¹

The author coordinated DoD's response to the 2013 shutdown and his experience suggest important lessons for DoD financial managers, who might someday find themselves acting in a similar capacity for their organization. Perhaps most important, fiscal lawyers must be involved at every step. Complex laws and rules govern shutdowns, and legal advice must be sought in order to avoid ADA violations. Financial managers need to ensure that DoD provides up-to-date guidance on shutdown details to its commanders and managers, and then financial managers should establish mechanisms to inform commanders and managers of progress during the shutdown and to make decisions that maintain reasonable consistency in responses across the department. While coordinating the 2013 shutdown, the author used emails and staff meetings to keep senior leaders informed, chaired a daily meeting with representatives from DoD organizations around the world, and appointed a senior member of his Senior Executive Service team to promote coordination among senior-level contacts within the commands.

Commanders and managers tried their best to try to maintain reasonable morale during the 2013 shutdown. Secretary of Defense Chuck Hagel, for example, dropped in on one of the author's daily shutdown coordination meetings to thank everyone who was working to coordinate the DoD response. After the shutdown, he awarded certificates to key players who worked in organizations reporting directly to him. His actions were much appreciated.

But in the end, no good comes from government shutdowns. They represent the U.S. government shooting itself in the foot. Given the history of frequent shutdowns, however, it would be naïve to think they will not occur again. When they do, defense financial managers need to be prepared to do all they can to minimize the adverse effects.

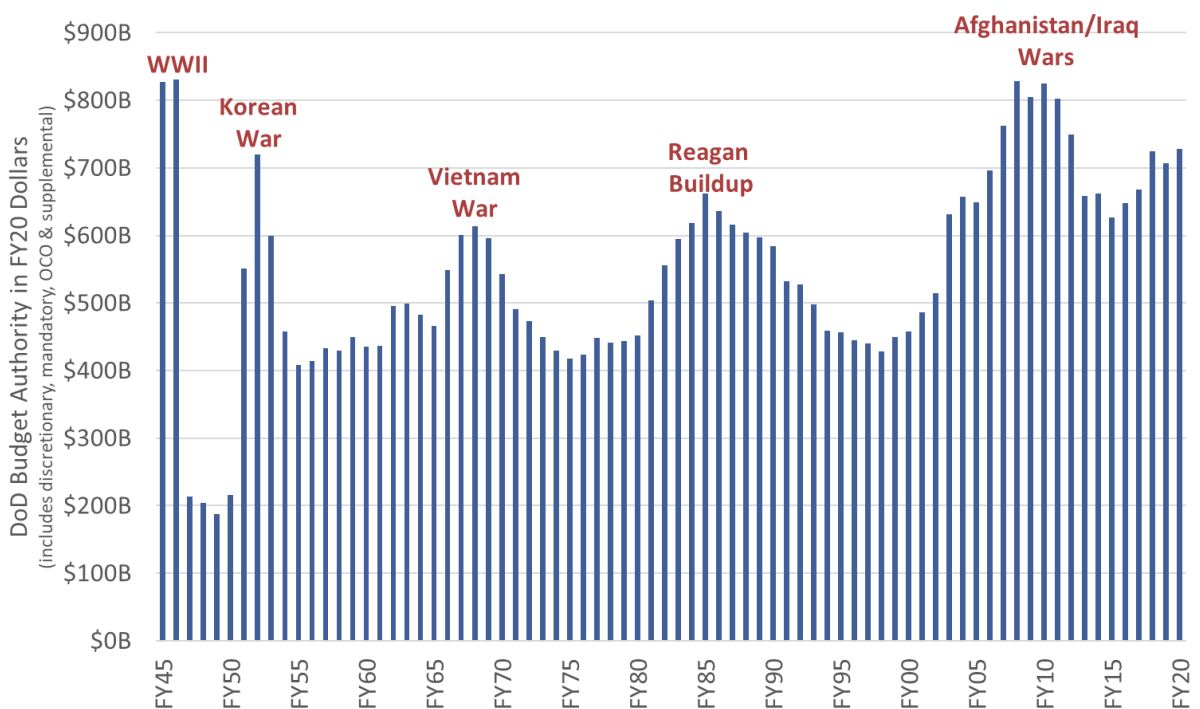
¹²¹ Hale, *Budgetary Turmoil*, 10–13.

6 | Assessing Budget Execution

DoD's budget execution processes handle large sums of federal dollars, amounts that have varied widely over the years. Defense funding typically peaks during wartime, often followed by funding valleys. Measured in FY 2020 dollars, spending since FY 1945 has been as high as about \$825 billion, as World War II ended, and then returned to that World War II high during the funding peak for the Afghan and Iraq Wars (see Figure 4). Right after World War II, funding rapidly plummeted to about \$210 billion, the lowest level in all the years since 1945. Sharp drops also occurred after the Korean and Vietnam Wars. More recently, defense funding has been higher and somewhat steadier. Over the past two decades, for example, total defense spending ranged from about \$460 to \$825 billion a year.

How well has DoD's budget execution process handled this large funding? This section begins with an assessment of the funds spent on financial management itself. Then it turns to some notable strengths of the budget execution process, followed by a discussion of shortcomings and the improvements they suggest, before concluding with an overall assessment of the budget execution process.

Figure 4: Total DoD Budget, FY 1945 - FY 2020



Source: Under Secretary of Defense (Comptroller), *National Defense Budget Estimates for FY2020* (Washington, DC: Department of Defense, May 2019), https://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2020/FY20_Green_Book.pdf.

Costs of Financial Management

DoD budget execution is, of course, not free. Without extensive efforts, it is impossible to distinguish the costs of budget execution from those of other financial management activities, and even the cost for all DoD financial management can only be roughly estimated without extensive efforts. At the end of FY 2019, about 43,000 of DoD's civilian personnel worked in accounting and budget activities (based on personnel in the accounting and budget category, known as the 500 series, established by the Office of Personnel Management) along with about 11,400 military personnel. Pay and allowances for these personnel amounted to roughly \$5.4 billion based on recent average costs per employee. In addition to pay costs, operating funds must be allocated to pay for base support, contractors, and related activities that support the personnel providing financial management. Precise estimates of these operating and contracting costs are not available, but a rough approximation of these costs can be obtained using total DoD support costs adjusted to match the size of the accounting and budget workforce. This estimate suggests that DoD allocated about \$2.6 billion to cover operating dollars that support DoD financial management.¹²² That brings the total DoD cost for financial management in FY 2020 to approximately \$8.0 billion, or 1.1 percent of the FY 2020 DoD budget. Recently, DoD performed its own assessment and reached a similar conclusion—financial management cost the Department about \$10 billion a year, roughly 1.4 percent of the FY 2020 budget.¹²³

How do DoD costs compare to other organizations? Comparisons focus on federal agencies, rather than the private sector, because federal agencies must use complex financial processes similar to those required at DoD.¹²⁴ As at DoD, total budgets for financial management in non-defense agencies are not publicly or readily available. But the Office of Personnel Management (OPM) does publish counts of total civilian personnel working in federal agencies, including separate counts of those involved in accounting and budget activities. Those counts serve as a rough proxy for financial management costs at non-defense agencies.

¹²² This allocation begins by estimating total support costs for DoD employees in FY 2019 expressed in FY 2020 dollars. Support costs include administrative and service-wide O&M (BA-4) excluding defense-wide because that category pays for many operating agencies (\$22.4 billion in FY 2019). Support costs also include base operating support (\$25.3 billion) and facilities, sustainment, restoration, and modernization activities needed to maintain bases (\$12.7 billion). After adjustment to FY 2020 dollars and adjusted for the share of civilian and military personnel working in accounting and budget, support costs equal \$1.58 billion. The allocation then adds about \$1 billion for the contract costs associated with audits because these large costs are not captured fully in this allocation process.

¹²³ This information, based on a DoD study, was provided to the author by Mark Easton in June 2021.

¹²⁴ The American Productivity and Quality Center (APQC) provides benchmark data on finance costs at private companies. But the data are not sufficiently comparable to DoD's estimates to be helpful and so are not included in the main text. A 2020 article based on APQC data puts the median cost of private-sector finance as a percent of revenue at 1.0 percent. Top performers are at 0.6 percent and bottom performers are at 1.6 percent. (See Perry D. Wiggins, "Total Cost to Perform the Finance Function: Metric of the Month," CFO, <https://www.cfo.com/budgeting/2020/01/total-cost-to-perform-the-finance-function-metric-of-the-month/>.) However, there are numerous and significant differences between private and public finance, including tax work (probably more in private sector, though DFAS must provide tax documents), stock/bond management (again, more in private sector, though DFAS does some for health and retirement funds), budgeting (probably much higher in the public sector because of extensive reviews including congressional involvement), and financial reporting (probably more in the public sector because of requirements for transparency).

The counts show that at larger non-defense agencies (defined here as those with civilian employment totaling more than 50,000), between 1.5 and 4.1 percent of all agency personnel worked in accounting and budget activities at the end of FY 2019. In that year, DoD civilian and military personnel devoted to accounting and budget, measured as a percent of the total number of civilian and military personnel, equaled 2.5 percent.

These workforce numbers suggest a mixed picture regarding the costs of DoD financial management. On one hand, DoD should devote a smaller fraction of its personnel to financial management because it is much larger than any other federal agency and so can realize economies of scale. On the other hand, DoD financial managers deal with a larger share of complex activities (such as research and procurement) compared with most other federal agencies and must serve a more worldwide organization. DoD must also have the staff and training to deal with financial management during wars. With all these factors in mind, the portion of DoD personnel devoted to accounting and budget appears to be roughly consistent with shares in larger non-defense agencies, which suggests that costs represent neither a strength nor a shortcoming for DoD financial management.

Strengths

In other ways, DoD's budget execution process displays important strengths. Most notably, DoD financial management processes have helped meet national security requirements effectively—in good part because DoD has a skilled and experienced workforce that can overcome challenges. This section begins by discussing these two key strengths and then addresses others.

Strengths

- **Meeting Security Needs**
- **Skilled, Experienced Workforce**
- **Increasing Focus on Data Analytics**
- **ADA Violations Held Down**

Meeting Security Needs

DoD budget execution processes seek to use available resources to meet national security needs effectively. Since FY 2000, DoD financial managers have had to accomplish this objective in the face of frequent disruptive events, including late budgets, sequester cuts, government shutdowns, and pressure to fund wars. To assess the effectiveness of DoD financial people and processes, the author interviewed 10 former military leaders who served as operational commanders and retired at the three- and four-star level within the past decade. Interviewees include representatives from all the military services except the new Space Force. The sample is small and not random, but if used with care, the results offer some insights about how seniors view the efficacy of defense financial management.

Some interviewees expressed concerns about defense financial processes, especially concerns about process problems such as sequestration, late budgets, and lack of flexibility to use funds. Several felt that only some of their financial managers could think strategically in ways that helped commanders develop options for reducing costs while limiting risk. A few also felt that some financial managers had difficulty communicating complex

When asked to rate defense financial management . . . the ratings of the seven senior military interviewees who offered quantitative assessments averaged 8.1 [out of 10], suggesting that these operational leaders judged defense financial management and its workforce to be quite effective.

financial topics in a way that commanders could understand and utilize. However, most interviewees spoke quite positively about defense financial managers. Almost all strongly praised their training and resulting knowledge, notably including both military and civilian managers. Several interviewees praised the dedication financial managers bring to their work and the professional pride they display, stating that their dedication and pride compared favorably with other support groups. When asked to rate defense financial management on a scale of 1 (almost always ineffective) to 10 (almost always effective), the ratings of the seven senior military interviewees who offered quantitative assessments averaged 8.1, suggesting that these operational leaders judged defense financial management and its workforce to be quite effective. Several of those interviewed commented that their ratings would have been even higher except for process problems such as sequestration and shutdowns.

These assessments by former military commanders matched those heard by the author. During his service as DoD comptroller and earlier as Air Force comptroller, the author rarely heard complaints about the overall performance of the financial workforce from senior commanders and managers. Sometimes he was treated to good-natured teasing about bean counters and green eyeshades, and often he heard substantive concerns about particular issues. But overall, he usually received compliments about how DoD financial managers used their skills and dedication to make financial management work well, with whatever resources they had available and during whatever circumstances they confronted.

This ability to help meet national security needs effectively surely ranks as the most important strength associated with the people and processes used to execute DoD budgets and conduct other financial management activities.

Skilled, Experienced Workforce

Much of the success of the financial management workforce stems from the quality of its people, which former military commanders regularly noted during the interviews just discussed. Experience constitutes a key attribute of the accounting and budget workforce. At the end of FY 2019, DoD civilians working in accounting and budget had an average of 13.6 years of federal service, and about

24 percent had served 20 or more years. While still high, experience levels have declined compared with two decades ago, when these professionals averaged 17.1 years of experience, and 35 percent had served for 20 or more years. This downward trend in part reflects retirements of older workers, which in the long run represents a plus for DoD financial management. New workers have less experience, but they bring with them new skills and knowledge (see discussion of data analytics below) along with fresh ideas. They also create a pool of younger workers who can step in as older workers leave government service.

Training represents another plus for DoD's financial workforce. Most of the military services operate schools that train military and some civilian personnel for beginning positions as financial managers. Many civilians, and most Navy financial personnel, receive training on the job or through other training sources. The services also operate schools for more senior financial personnel, including the Army Financial Management and Comptroller School, the Air University's Defense Financial Management and Comptroller School, financial programs at the Naval Postgraduate School, and the Army comptroller program operated by Syracuse University.

In addition, DOD has a course-based certification program for financial managers. Established by Congress in the FY 2012 National Defense Authorization Act, this program classifies all DoD financial jobs based on their scope and complexity, ranging from Level 1 jobs (least complex) to Level 3 jobs (most complex). The program identifies the courses and experience that financial managers must complete in order to be certified at Levels 1, 2, and 3. To hold a job at a particular level, the individual must already be certified at that level or must achieve the required certification within two years.

The DoD Financial Management Certification Program assists in maintaining a strong financial workforce by establishing guidelines so that people select appropriate courses. It also permits managers to emphasize training in key areas such as audit and analytics, thereby strengthening workforce skills in key areas.¹²⁵ Because it is mandatory, the program helps defense financial managers acquire the time and money necessary to accomplish training.¹²⁶ In addition, the certification program encourages individuals to participate in test-based certification programs such as the Certified Defense Financial Manager program run by the American Society of Military Comptrollers.

The capability of the financial management workforce has been further strengthened in recent decades because more professionals have become generalists. At the end of FY 2019, about 35 percent of the civilians in accounting and budget worked in job categories (designated by OPM as 501 and 505) that manage or direct all financial resources rather than specializing in, say, budget or accounting. Two decades ago, only 12 percent of the workforce occupied these generalist categories.

¹²⁵ Glenda Scheiner, "Briefing on DoD Financial Management Certification Program," (presentation, Office of the Under Secretary of Defense (Comptroller), n.d.), https://comptroller.defense.gov/Portals/45/documents/FMCertProgram/Standard_DoD_FM_Briefing.pdf.

¹²⁶ A recent policy change allowed individuals to substitute other certifications (such as the CPA certification) for the DoD FM certifications. Today, however, the majority of DoD financial managers are certified under the DoD program.

The growth in generalists has been offset by declines in more specialized fields, especially accounting technicians. The remaining accounting technicians still perform important services, but automation of processes at DFAS has sharply reduced the number required. This shift toward generalists has helped the financial workforce deal with the increasing share of issues that can best be resolved by those with broad financial skills.

Overall, the capability and experience of the defense financial management workforce represent an important strength.

Increasing Focus on Data Analytics

For many decades, DoD financial managers have assisted in formulating budgets, provided oversight during budget execution, supplied pay and accounting services, and created reports for commanders and managers on budget and accounting topics. Today's DoD financial managers continue to provide these valuable services. Increasingly, however, commanders and managers ask the department's financial managers to be part of teams that analyze data in order to identify the most effective ways to accommodate changing military requirements and make improvements in DoD's operations. This increased focus on data analytics occurs during all phases of defense financial management but is discussed here because budget execution often demands it.

Changes in the education and training of DoD's financial managers have helped them focus on data analytics. Analysis benefits from tools and skills gained by attending college and graduate school, and an increasing fraction of DoD financial managers have done both. At the end of FY 2019, 65 percent of DoD's civilian financial managers held a bachelor's degree or higher, compared with 39 percent who held those degrees two decades earlier. Among those with a bachelor's or higher, about 27 percent held a master's degree or higher, compared to just 8 percent two decades earlier.¹²⁷ More financial management training programs are focusing on analytics, such as training at the Defense Financial Management and Comptroller School, training in analytics for senior DFAS personnel provided by the University of South Carolina, and classes offered by the Defense Resource Management Institute located at the Naval Postgraduate School.

Data analytics also benefits from a younger workforce because they tend to be more comfortable with technology. Among DoD civilians working in accounting and budget, the portion of professionals aged 20 to 34 stood at 17 percent by the end of FY 2019, compared with 12 percent two decades earlier. The FY 2019 percentage in DoD exceeds the average in non-defense agencies (12 percent) but still lags well behind the private sector. In 2016, the Current Population Survey published by the U.S. Census Bureau and the Bureau of Labor Statistics indicated that workers aged 20 to 34 made up about 28 percent of the total U.S. professional and technical workforce.¹²⁸

¹²⁷ Author's calculations based on data from OPM's Fedscope system.

¹²⁸ Department of Professional Employees, "The Young Professional Workforce," AFL-CIO, March 16, 2017, <https://www.dpeaflcio.org/factsheets/the-young-professional-workforce>.

While a changing workforce and training have brought a greater focus on analytics, DoD’s use of “big data” has begun to turn that focus into reality.

While a changing workforce and training have brought a greater focus on analytics, DoD’s use of “big data” has begun to turn that focus into reality. A few examples suggest the scope and nature of the big-data analytic efforts in the financial community. Starting in 2017, the Army implemented what it

calls robotic process automation, gathering information rapidly from multiple data sets in order to help commanders and managers understand and solve financial problems.¹²⁹ DFAS instituted robotics process automation in 2019 and has developed about 20 programs or “bots” to aid in analyzing defense financial information to be used in audits and other analyses. Then, in July 2020, DFAS created a data analytics center of excellence to help refine and improve data management practices and to provide insight to the agency through applied data analytics.¹³⁰ In 2018, the Office of the Secretary of Defense reported the use of a new analytic tool to aid in the audit of financial statements, assist in analysis of expiring funds (that is, funds that will soon no longer be available for obligation), and support for DoD’s cost-management initiatives.¹³¹ The big-data software known as ADVANA epitomizes DoD’s efforts to use computer tools to extract and analyze large amounts of data in ways that help financial managers and other professionals solve problems. ADVANA needs continued work to standardize data and bring together relevant types of information. Nevertheless, as of 2019, ADVANA hosted more than 15 billion transactions and had more than 7,000 users. The system supported analytic efforts for audit, financial operations, cost management, and performance management and has been specifically supported by Secretary of Defense Lloyd Austin.¹³²

DoD financial managers need to continue to strengthen their focus on data analytics. Some operational commanders interviewed by the author stated that not all financial managers had the ability to identify financial options that minimize risk to mission needs. Nevertheless, the growing focus on data analytics arguably represents a strength for budget execution and other aspects of defense financial management.

¹²⁹ Christine Gex and Mark Minor, “Make Your Robotic Process Automation (RPA) Implementation Successful,” *Armed Forces Comptroller* 64, no. 1 (Winter 2019), 18,

<https://cdn.flipsnack.com/widget/v2/widget.html?hash=fc3eoiflu&bgcolor=EEEEEE&t=1548875669>.

¹³⁰ Steve Lawson, “DFAS Stands up Data Analytics Center of Excellence,” DFAS, press release, July 21, 2020, https://www.legistorm.com/stormfeed/view_rss/1962015/organization/95368/title/dfas-stands-up-data-analytics-center-of-excellence.html.

¹³¹ David L. Norquist, “Comptrollers Corner,” in DoD FM Connection, Fall 2018, 2, <https://engage.asmcnline.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=7b815c14-93e7-4387-9fb1-e0a106ce8cb7>.

¹³² David L. Norquist, Statement to the Subcommittee on Readiness of the Senate Armed Services Committee, Washington, DC, November 20, 2019, 6, https://www.armed-services.senate.gov/imo/media/doc/Norquist_11-20-19.pdf; and Lloyd J. Austin, “Advance Policy Questions,” Senate Armed Services Committee, 2021, 91, https://www.armed-services.senate.gov/imo/media/doc/Austin_APOs_01-19-21.pdf.

ADA Violations Held Down

As noted above, in 1905, Congress passed and the president signed the ADA. The act sought to ensure that the executive branch spent money only as approved by Congress, a restriction required by the Constitution but not always followed during the nineteenth century. Today, the ADA law imposes numerous limits on defense financial management, limits that are sometimes violated.

DoD has reported a number of ADA violations over the past decade, but the associated dollar amounts constitute a tiny percent of the DoD budget. ADA violations must be reported to the president, and the GAO website displays the reports. From FY 2010 to FY 2019, the most recent 10 years for which data are available as this report is written, DoD reported 66 violations, with dollar amounts totaling \$1.5 billion. Reported ADA violations during this period equate to only 0.023 percent of DoD budgets, or slightly more than two cents for every \$100 DoD obligated.

DoD also performed as well or better than non-defense agencies with regard to ADA violations. During the period from FY 2010 to FY 2019, DoD executed about half of both the total discretionary dollars allocated to federal agencies and employed about half of all federal employees.¹³³ But DoD owned slightly less than half of the ADA violations reported by all federal agencies when measured by numbers and only about one-third when measured by dollars. DoD's ADA performance may be even better than these numbers suggest because the department has one of the most complex budgets in the federal government, which makes it more difficult to avoid ADA violations.

Critics would argue that DoD and other federal agencies do not identify all ADA violations. That is almost certainly true. But DoD financial managers do care about ADA violations and are likely to identify any they see. Moreover, DoD has many hundreds of internal auditors—in addition to external auditors at GAO—who are always on the lookout for ADA violations. Hence, DoD probably finds many of the violations. Moreover, even if a substantial number are missed, the fraction of dollars involved in ADA violations would remain tiny compared to the size of DoD budgets.

One violation of the ADA is one too many, and DoD should continue to try to improve its performance. But the department has had success in holding down violations of this important law, in part because relevant DoD professionals take this law seriously but also because DoD provides fiscal law and other training to its financial professionals as well as to acquisition and other professionals who help manage its complex budgets.

¹³³ Dollar calculations are based on data for discretionary funding from the historical tables of the FY 2021 budget (Table 5.4). Personnel numbers reflect active-duty military personnel and civilians (from the National Defense Budget Estimates for FY 2021, Table 7-6).

Shortcomings and Needed Improvements

While it has notable strengths, DoD's budget execution process also has shortcomings. This section identifies those shortcomings and recommends improvements to remedy some of them, beginning with the two the author feels are especially important.

Reprogramming Process

The long history of reprogramming, described previously, has led to today's complex process that permits DoD to move funds from lower- to higher-priority programs during budget execution. The process has some significant shortcomings.

Timeliness is one them. A recent analysis of Navy prior-approval reprogramming actions executed between FY 2007 and FY 2018 indicated that the approval process required an average of 96 days from the time the first Navy office approved the reprogramming (and so it became a formal request) to final approval by Congress (including 41 days in DoD and 55 days in Congress). The maximum times required to process a reprogramming in a given year extended for many more days, ranging from 103 days for a reprogramming that took the most time in FY 2012 (including 11 days in DoD and 92 in Congress) up to 363 days for the longest reprogramming in FY 2013 (including 127 days in DoD and 236 in Congress).¹³⁴ These data apply only to the Navy, but the other services probably take similar time to execute reprogrammings.

Timeliness is not the only aspect of the reprogramming process that needs repair. As noted above, much of the process is not codified in law but rather exists as an informal agreement between the Pentagon and Congress. The informal nature of this process permitted the Trump administration to reprogram substantial sums of money out of the DoD budget for use in extending and improving the wall on the U.S. border with Mexico. In FY 2019 and FY 2020, the Trump administration transferred a total of about \$6.3 billion using reprogramming actions that did not adhere to the informal process

Improvements to Remedy Shortcomings

- **Reprogramming Process:** Speed up process, restore Congressional trust
- **Selected Flexibility Increases:** Increases for selected programs, especially software and high-tech initiatives
- **Cost Data:** Use data more effectively to identify efficiencies
- **Use-it-or-Lose-it:** Permit carryover of operating funds
- **Congressional Guidance:** Congress should reduce volume by selecting only high-priority guidance
- **Late Appropriations:** Delay beginning and end of fiscal year
- **Canceled Appropriations:** Seek policy changes to minimize canceled appropriations
- **Clean Audit:** Continue to pursue this initiative aggressively

¹³⁴ Fritsch et al., *The Nature of DoD Reprogramming*, 50.

requiring congressional approval.¹³⁵ These reprogramming actions represent another of what Congress perceives as a long history of reprogramming abuses, described earlier in the paper, which date back to the nineteenth century and include actions such as those pursued by President Nixon in the 1970s in connection with the Cambodia intervention.

Ignoring the informal rules significantly reduced the trust between Congress and DoD regarding reprogramming. Congress reduced the ceilings on funds available for prior-approval reprogramming actions but has not done more, perhaps because of a tacit understanding that the Trump administration would not use unapproved reprogramming actions to move funds except when paying the costs of border wall improvements. But the reduced trust could cause future problems.

DoD depends critically on having a strong reprogramming process. Budget formulation and congressional approval often consume two years or more, and budget execution can take several more years. During these lengthy periods, changes inevitably occur in complex programs. DoD must have the ability to move money among programs in order to execute public funds effectively. Reprogramming actions can also avert or mitigate unexpected budget events. For example, during the sequestration cuts in FY 2013, the author led Pentagon efforts to reprogram funds in order to minimize adverse effects on training, thereby limiting harm to the Pentagon's military capability amid a war. Because of the importance of the reprogramming process, the author expressed strong concern about the border wall funding transfers and their possible effect on the informal reprogramming agreement.¹³⁶

DoD should take steps to improve its internal reprogramming process. The Pentagon should establish a study group to look for ways to speed up the process of formulating reprogramming requests. In the author's experience, delays often occur because the service or agency requesting the reprogramming

DoD needs to make every effort to avoid additional restrictions on a reprogramming process that is important to effective budget execution and therefore to effective national security.

does not provide a strong rationale for its request. Another problem relates to the program cuts needed to offset increases; the military services sometimes recommend program cuts that Congress will likely reject. The DoD study group should seek ways to educate users of the reprogramming

¹³⁵ In addition to the reprogrammings, the administration used emergency authorities to transfer another \$3.6 billion of military construction funds to support border wall construction. The courts have never fully resolved the legality of these actions.

¹³⁶ Robert Hale, "A Serious Financial Problem Looms at the Pentagon," Defense News, May 9, 2019, <https://www.defensenews.com/opinion/commentary/2019/05/09/a-serious-financial-problem-looms-at-the-pentagon/>.

process in order to speed formulation. Once DoD has sped up its process, it should ask Congress to do the same.

Most importantly, DoD should seek to repair the gap in trust caused by the Trump administration's decision to reprogram funds for the border wall without congressional approval. The Biden administration halted construction on the wall projects. That gives the current DoD team an opportunity to repair damage to the informal agreements with Congress. DoD needs to make every effort to avoid additional restrictions on a reprogramming process that is important to effective budget execution and therefore to effective national security.

Selected Flexibility Increases

In some cases, reprogramming alone cannot resolve shortcomings in the budget execution process. Software development represents a key example. Software sometimes goes back and forth among development, purchase, and sustainment—making these shifts at times determined by progress on the system. The shifts make it almost impossible to budget funds in the right category (for example, research funds for development and procurement for purchase) a year or two before budget execution begins. If the right category of funds is not available, software development can be significantly delayed or rendered less effective.

In the FY 2021 National Defense Authorization Act, Congress approved a DoD proposal that could eventually solve this budget execution problem, and the appropriators accepted the new initiative. For several pilot programs, Congress permitted DoD to budget for software using a single category of funding that can be used to fund research, procurement, and sustainment depending on the needs of the program. The pilot programs involve substantial dollars—\$0.7 billion for FY 2021 and a request totaling \$2.3 billion for FY 2022. The Defense Innovation Board recommended this approach in its 2019 congressionally-mandated study of software development.¹³⁷ DoD has implemented the pilot program by creating what it has labeled “budget activity 8”—located within the appropriation for research, development, test, and evaluation—that contains these multiuse funds. Barring major problems, DoD should propose and Congress should permit expansion of this funding approach to all software programs that can benefit from its use. This would constitute a significant improvement in budget execution because software lies at the heart of important national security priorities such as cybersecurity and artificial intelligence.

Multiuse funds would also benefit other programs, especially those involving technology that changes quickly. As for software, the absence of enough funds in the right appropriation category can lead to delays in programs or it can force DoD to pursue less effective solutions. To meet this need, DoD should propose that, for selected programs, Congress permit hardware and other programs to be funded using multiuse dollars in a manner similar to the software initiative. To increase chances for congressional approval, DoD should start slowly by selecting for this proposed new flexibility

¹³⁷ Defense Innovation Board, *Software Acquisition and Practices (SWAP) Study*, Final Report (Washington, DC: DoD, 2019), 37–38, <https://innovation.defense.gov/software/>.

programs involving technology that can shift substantially during the years between when budgets are finalized and when they are executed. Some space programs would probably fit in this category, as might other high-tech efforts. This new approach could help solve the so-called “valley of death” problem, which occurs when research projects cannot transition quickly into projects that require procurement funding. Congress is also looking at other approaches to help projects successfully cross the valley of death.¹³⁸

Given the importance of injecting more technology into DoD weapons and programs, seeking increased flexibility to implement technology initiatives should represent a high priority for DoD financial leaders.

Congress could further improve DoD budget execution by permitting selected use of “portfolio budgeting.” For example, Congress could permit DoD to budget in broader categories for some types of programs and then use the funds as needed during execution. DoD already has this type of flexibility in the operation and maintenance accounts—day-to-day operating accounts in which appropriations for broad budget activities (such as operating forces as well as training and recruiting) can be

used as needed unless Congress has imposed specific restrictions. A recent Hudson Institute study advocated portfolio budgeting for all categories of procurement.¹³⁹ The author believes that, at least initially, DoD should recommend a limited version of portfolio budgeting in order to increase the chances of congressional approval, perhaps recommending its use for high-tech programs for which success depends on agility during budget execution. To further increase the chances for legislative approval, DoD should agree to provide advance notification to Congress of, say, 30 days before the Pentagon alters any obligation plans within a portfolio.

In the author’s experience, DoD managers often have difficulty producing specific examples of substantial problems associated with the lack of budgetary flexibility. One reason is that Pentagon financial managers, as well as acquisition and other managers, are adept at solving problems. But Congress will understandably want specific examples of problems before granting more flexibility. Assuming problems exist, DoD should redouble its efforts to identify them if it hopes to garner more flexibility. Given the importance of injecting more technology into DoD weapons and programs, seeking increased flexibility to implement technology initiatives should represent a high priority for DoD financial leaders.

¹³⁸ Mila Jasper, “Lawmakers Want DOD to Explore Tech’s Valley of Death Problem,” Nextgov, July 27, 2021, <https://www.nextgov.com/emerging-tech/2021/07/lawmakers-want-dod-explore-techs-valley-death-problem/184079/>.

¹³⁹ William Greenwalt and Dan Patt, *Competing in Time: Ensuring Capability Advantage and Mission Success Through Adaptable Resource Allocation* (Washington, DC: Hudson Institute, 2021), 52–53, <https://www.hudson.org/research/16717-competing-in-time-ensuring-capability-advantage-and-mission-success-through-adaptable-resource-allocation>.

Cost Data

Sometimes DoD managers already have access to good cost data. Managers at depots that repair equipment often have cost accounting systems that provide accurate and detailed data. Acquisition managers use contract data to obtain actual costs, though some “digging” may be required to assemble the information. Enterprise resource planning systems, which are now widely though not completely installed throughout DoD, can be used to gather cost data, though not much use is currently being made of this capability in part because of the time required to enter the cost data into the planning systems. Increasingly, big-data tools such as ADVANA and similar systems, while they require further refinement and improvement, can help provide cost data and check it for comparability with other information. They constitute the most effective tools for gathering cost data because they can be focused on areas of particular interest. There is a start-up cost to program these systems to extract and analyze the data, but after that, cost information can be updated regularly at a relatively low cost.

However, cost data must not only be identified to produce a more efficient DoD; it must be analyzed and leaders must take action to identify and implement cost-saving changes. Opportunities surely exist. Comparing costs for programs across units within a military service—or better yet across services—can prod commanders and managers to switch to more efficient practices that hold down costs. Accurate analyses require that the programs being compared be similar in their nature and scope, and meeting this requirement can be challenging. But with effort, reasonable comparisons can be achieved, especially among support programs.

DoD financial managers should look for opportunities to extract and use cost data utilizing tools such as ADVANA. They should then compare costs across organizations with similar missions in order to identify efficiencies. Chances for success will be improved by focusing on support activities where outputs can often be more readily measured and by starting small, perhaps by focusing on changes within an organization or command where the leader wants to find efficiencies. Comparisons of costs for similar support missions across an entire service would yield larger payoffs, if successful, but would also require support from the services’ most senior leaders. However they do it, DoD financial managers need to help their leaders make better use of cost data to eliminate this budget execution shortcoming.¹⁴⁰

Use-It-or-Lose-It¹⁴¹

As the end of each fiscal year approaches, teams at most defense organizations focus on obligating all the funds in the Pentagon’s day-to-day operating budgets, which are available for use only during the year for which they are appropriated. To do otherwise, they fear, would suggest that their

¹⁴⁰ Based in part on Robert Hale, “What DoD Financial Managers Can Learn from Their Critics,” *The Armed Forces Comptroller* 64, no. 1 (Winter 2019), 12, <https://cdn.flipsnack.com/widget/v2/widget.html?hash=fc3eoiflu&bgcolor=EEEEEE&t=1548875669>.

¹⁴¹ Based on Robert Hale, “Why DoD’s Year-End Spending Needs to Change,” *Breaking Defense*, March 23, 2016, <https://breakingdefense.com/2016/09/why-dods-year-end-spending-needs-to-change/>.

organizations do not need all their available funds and so invite future budget cuts. The pithy title for these actions—use-it-or-lose-it—constitutes an important shortcoming in DoD budget execution.

As a result of use-it-or-lose-it, DoD obligations spike at year's end. In a 2010 report, researchers from Harvard and Stanford showed that, based on data for FY 2004 to FY 2009, final-week obligations on DoD contracts were about 4.5 times higher than the average weekly obligations during the rest of the year.¹⁴² The spike does not necessarily mean that organizations waste year-end funds. But often year-end funds finance construction-related goods and services, office equipment, and IT equipment and services—purchases that may not directly support the most critical DoD missions. Research on year-end IT purchases also suggests that final-week contracts are of lower quality than those made during the rest of the year, no doubt because contracting and other personnel have less time to obligate funds carefully during year-end spending spikes.¹⁴³ The same results probably apply to other categories of funding.

High year-end obligations concern federal employees and have for many years. While serving as DoD comptroller, the author reviewed federal employees' suggestions for making government more efficient. He noted that many federal employees recommended reducing year-end obligations. In a 2007 survey, DoD financial management and contracting professionals expressed the same concern.

Congress could help eliminate the use-it-or-lose-it shortcoming by permitting some DoD funds to be carried forward. Under this approach, DoD would be allowed to obligate a modest percentage (perhaps 5 to 10 percent) of its funding in two major appropriations—operation and maintenance as well as military personnel—during the fiscal year following the year of appropriation. Currently, all funding in these appropriations must be obligated in the year of its appropriation. This added flexibility would not make any more funds available to DoD. But managers could decide whether to buy office furniture for the headquarters at the end of the fiscal year or wait and let training or other mission needs compete for the funds during the next year. While serving as DoD comptroller, the author urged congressional committees to allow some carryover but did not succeed. DoD recently requested a carryover of 50 percent in its operation and maintenance accounts, similar to the flexibility available in some non-defense agencies, but Congress again did not approve the change. Despite these setbacks, the administration should keep trying to secure carry-over authority.

Late Appropriations

As noted above, Congress and the president have frequently failed to agree on a DoD appropriation by the beginning of the fiscal year, especially in recent years. Indeed, in many recent years, appropriations have not been completed until three to seven months after the start of the new fiscal

¹⁴² Robert Hale, "Bad Idea: The 'Use-It-Or-Lose-It' Law for DoD Spending," CSIS, *Defense360*, December 15, 2020, <https://defense360.csis.org/bad-idea-the-use-it-or-lose-it-law-for-dod-spending/>.

¹⁴³ Jeffery B. Liebman and Neale Mahoney, *Do Expiring Budgets Lead to Wasteful Year-End Spending? Evidence from Federal Procurement* (Washington, DC: National Bureau of Economic Research, revised 2018), abstract, 17, 42, https://www.nber.org/system/files/working_papers/w19481/w19481.pdf.

year. These late appropriations lead to continuing resolutions, which cause problems—sometimes serious problems—during budget execution.

If Congress and the president want to enact more budgets on time, the author believes that the fiscal year should begin and end later. The December holiday recess can be an action-forcing event for Congress; delaying the end of the fiscal year would take advantage of this tendency. Also, during every other year, a new Congress begins soon after December 31, which tends to spur congressional action prior to December 31 because all legislation not enacted during the previous Congress must be reintroduced during the new one.

[D]elaying the beginning and the end of the fiscal year, if done carefully, represents the solution most likely to minimize late budgets.

DoD needs to work with Congress to choose an end for the fiscal year that promotes on-time budgets but also recognizes the demands placed on financial and other managers. These goals sometimes conflict. For example, ending the fiscal year on December 31

seems logical because the fiscal and calendar years would then coincide. However, December 31 is not a good choice because DoD would have to conduct its final review of the current fiscal year (known as “close out”) during the December holidays and, at the same time, would have to finalize the budget for the next fiscal year. The strain on DoD’s financial and other managers would be unacceptable. Ending the fiscal year on January 31 and moving the date for submission of the next budget to early April, would resolve some of the workload issues and would still provide Congress substantial time to review the budget for the next year. A January 31 end for the fiscal year would also have avoided all but 4 of the 35 late budgets that have occurred since FY 1977.

Absent a major change, recent history offers little hope that late budgets will go away. If anything, late budgets are becoming more frequent and delays have increased in length. In the author’s view, delaying the beginning and the end of the fiscal year, if done carefully, represents the solution most likely to minimize late budgets.

Congressional Guidance

As noted above, guidance from the DoD authorizing committees, as measured by pages in the annual authorization bill, has increased about a hundredfold since the 1970s and has tripled just since FY 2000. Pages of bill text issued by the DoD appropriators have increased only threefold since the 1970s, but those committees still impose numerous restrictions on DoD’s ability to fund its programs.

In 2010, early in his tenure as the DoD comptroller, the author invited his counterparts from allied nations to visit. Comptrollers from Canada, Australia, and New Zealand came to the Pentagon for several days of interesting talks. When shown the size of the documents that the U.S. Congress issued governing DoD activities, these foreign comptrollers were appalled and wondered how DoD accommodated all this guidance.

The answer is that accommodating the guidance adds to overhead costs and, importantly, slows the process of executing DoD budgets and reduces its ability to react to changes in program needs—just as Melvin Laird stated in his final report to Congress in 1973 (see “Increasing Congressional Restrictions” above). In the author’s view, Congress, while it clearly has the constitutional authority to issue all this guidance, needs to reduce the volume of the guidance in its bills and reports. Focusing more on high-priority guidance would speed up budget execution and permit Pentagon leaders to spend more time responding to the most important congressional concerns.

Canceled Appropriations

An earlier section of this paper (see “Unused Balances” above) described the history of DoD’s process for obligating and disbursing funds, ending with a description of the current system. The current system permits differing periods for obligating funds: one year for the operating appropriations (military personnel and operation and maintenance), two years for research appropriations, and three years for procurement appropriations (with the exception of five years for shipbuilding). Funds obligated during the period of availability can be used to pay bills for up to five years. After the fifth year, funds cancel and can no longer be used by the agency for any purpose except fixing clerical errors.

In a May 2021 report, GAO examined funds that canceled in all federal agencies from FY 2009 to FY 2019. During this period, canceled funds averaged \$11.6 billion a year at DoD, or about 1.8 percent of its budgets for time-limited funds. Cancellations at all federal agencies averaged 1.6 percent. For DoD, GAO noted that programs with uncertain final costs, which can lead to overestimated budgets, represented a key cause of canceled funds.¹⁴⁴

If all needs have been met, funds should be allowed to cancel. However, DoD should examine the cause of canceled funds in more detail and try to devise policies to minimize them where valid needs for the funds exist. According to GAO, both the Army and Air Force have programs to monitor and minimize funds likely to cancel, and their programs would be a good place to start. Publishing figures on canceling funds would heighten awareness, perhaps leading to tighter execution. Congress could also help. The operating accounts, which must be obligated in the year of appropriation, pay some bills that are not known for certain until after the end of the fiscal year—such as bills for year-end permanent change of station moves and utility bills for the final month of the fiscal year. To avoid risking violation of the ADA, obligations for these bills often include a cushion of extra funds, which can turn into canceled funds if not needed. Congress could extend the availability of at least part of the operating funds into the second year, which should reduce the need for a cushion of extra funds (see the “Use-It-or-Lose-It” discussion above).

¹⁴⁴ Government Accountability Office, *Federal Budget: A Few Agencies and Program-Specific Factors Explain Most Unused Funds* (Washington, DC: 2021), 7–9, 14–15, 18–20, <https://www.gao.gov/assets/720/714527.pdf>.

Clean Audit

In 1994, Congress passed and the president signed the Government Management Reform Act, which required that all large federal agencies submit audited financial statements.¹⁴⁵ Audits are usually conducted by independent public accountants, and agencies seek an unmodified or “clean” opinion indicating that there are no material weaknesses in the statements. Today, DoD is the only cabinet-level agency that has not received a clean opinion, and it may be many years before that happens. In 2018, David Norquist, the DoD comptroller at that time and later the deputy secretary of defense, stated that a clean opinion for all of DoD could require 10 years, or until about 2028.¹⁴⁶ Norquist emphasized that the department would see significant benefits from the audit much earlier than 2028.

While a detailed discussion of financial statement audits lies beyond the scope of this paper, the lack of audited financial statements has led to harsh criticism of DoD financial management and so should be taken into account in assessing budget execution processes. As noted above, Senator Chuck Grassley has been one of DoD’s most strident critics on financial issues. In 2017, Grassley noted that the DoD CFO had declared the department to be audit-ready but then indicated that clean opinions will not be achieved for many years. Grassley asked why the “CFO is predicting failure (on the audit) before the audit even starts.”¹⁴⁷ In that same year, the Heritage Foundation questioned whether DoD needs the same type of strict audit that public corporations must undertake.¹⁴⁸ Some critics have gone even further. A press article in 2011 asserted that DoD failed audits because it has not been able to put in place a “standardized system to know how much money it has and where it is going.”¹⁴⁹ Another article in 2019 reiterated this point, stating that, for the most part, DoD does not know how much it spends.¹⁵⁰

The assertion that DoD does not know where it obligates funds is wrong. In FY 2020, DFAS maintained about 98 million general ledger accounts and executed about 150 million pay, travel, and commercial payments. All but a tiny fraction of these must be accurate or there would be massive and obvious accounting and payment mistakes, neither of which are occurring. DoD has stated that it does know where it is obligating its money, adding that the ongoing financial audits—while they have not yielded

¹⁴⁵ *Government Management Reform Act of 1994*, Public Law 103-356, October 13, 1994, Title IV, Section 405, <https://www.usaid.gov/sites/default/files/documents/1868/5401a5.pdf>.

¹⁴⁶ Tony Bertuca, “Pentagon comptroller: Clean audit could take 10 years,” *Inside Defense*, March 7, 2018, <https://insidedefense.com/daily-news/pentagon-comptroller-clean-audit-could-take-10-years>.

¹⁴⁷ Chuck Grassley, “Pentagon clean audit opinions remain elusive,” (speech, Senate floor, Washington, DC, September 12, 2017), <https://www.grassley.senate.gov/news/news-releases/grassley-clean-audit-opinions-pentagon-remain-elusive>.

¹⁴⁸ Thomas Spoehr, “The Unaffordable Pentagon Audit,” *The Heritage Foundation*, December 27, 2017, <https://www.heritage.org/defense/commentary/the-unaffordable-pentagon-audit>.

¹⁴⁹ Dina Rasor, “Department of Defense’s Unending Nightmare: Pass an Audit by 2017?,” *TRUTHOUT*, September 28, 2011, <https://truthout.org/articles/department-of-defenses-unending-nightmare-pass-an-audit-by-2017>.

¹⁵⁰ Matt Taibbi, “The Pentagon’s Bottomless Money Pit,” *Rolling Stone*, March 17, 2019, <https://www.rollingstone.com/politics/politics-features/pentagon-budget-mystery-807276/>.

a clean opinion—identified no instances that would suggest DoD did not know where obligated dollars are being spent.¹⁵¹

DoD must resolve many issues before it can realize a clean audit opinion. The department needs fewer financial systems and better internal controls in those that remain, as well as more consistent controls over financial reporting. Another issue that must be resolved involves improper payments—payments that should not have been made or that were made in incorrect amounts. In its financial report for FY2020, DoD stated that it might have made \$11.4 billion in improper payments, compared with a reported level of only \$1.2 billion in its FY 2018 report.¹⁵² This almost tenfold growth occurred primarily in the military and civilian pay accounts. The Pentagon suggested that the growth reflects new testing and sampling techniques, but as this paper is written, the department still has not announced the cause of the improper payments. Whatever their cause, DoD must resolve this issue, along with others noted above, before it can obtain a clean audit opinion.

While serving as DoD comptroller, the author undertook focused audits aimed at cleaning up financial information and achieving clean audit opinions on the information most used by DoD managers, especially budget data but also counts and locations of defense assets. The approach held down the cost of audits, and a major study of DoD audits supported it.¹⁵³ The approach achieved some success, especially in the Marine Corps.¹⁵⁴ Starting with statements for FY 2018, the Pentagon decided to expand the audit to all financial statements. This broader approach is expensive, costing a bit less than \$1 billion a year (about half to improve financial information and the rest for the audit itself). Deputy Secretary Norquist testified that this full audit approach has already helped DoD improve the accuracy of its inventory, reduce IT vulnerabilities, and improve data available for decisionmaking.¹⁵⁵

While the full audit approach is costly, the author believes that DoD needs to continue to focus on financial statement audits until the Pentagon achieves and sustains clean opinions. Successful audits lead to improvements in financial data resulting from the audits, and the department also needs clean audits to reassure Congress and the public that it remains a good steward of taxpayer dollars.

¹⁵¹ David Vergun, “DoD Audit: Separating Myth from Fact,” U.S. Department of Defense, Press release, May 16, 2019, <https://www.defense.gov/Explore/News/Article/Article/1848744/dod-audit-separating-myth-from-fact/>.

¹⁵² Department of Defense, *Agency Financial Report for Fiscal Year 2020* (Washington DC: DOD, 2020), 257, https://comptroller.defense.gov/Portals/45/Documents/afr/fy2020/4-Other_Information.pdf; and Department of Defense, *Agency Financial Report for Fiscal Year 2018* (Washington, DC: DOD, 2018), 168, https://comptroller.defense.gov/Portals/45/Documents/afr/fy2018/4-Other_Information.pdf.

¹⁵³ Peter K. Levine, *Auditing the Pentagon: A Road to Nowhere?* (Washington, DC: Institute for Defense Analyses, 2018), 138.

¹⁵⁴ In late 2013, the Marine Corps received a clean opinion on its budget statement, which would have been a first for any military service. The DoD inspector general later revoked that opinion because of possible audit problems but then, upon further review, decided that the problems were not material, according to interviews undertaken by the author. Even after reaching this conclusion, the inspector general refused to reinstate the clean opinion, which the author believes was an unfortunate mistake.

¹⁵⁵ Norquist, Statement to Readiness Subcommittee, 5–7.

Overall Assessment

At the beginning of this paper, the author identified three important goals for the budget execution process: use funds in ways that meet national security needs effectively, comply with laws and regulations, and institute processes that hold down costs in order to improve efficiency in the total DoD budget. How does budget execution rate on these goals?

Overall, budget execution scores lowest on efficiency. In a previous paper, the author outlined DoD efforts to execute budgets efficiently, defined as achieving desired national security goals at less cost. DoD has achieved notable efficiency successes, including some directly related to financial management that are described in this paper: consolidating accounting and finance services and using commercial credit cards to make small purchases and pay travel costs. In the 1990s and early 2000s, DoD achieved large efficiencies by realigning and closing bases. More recently, the Pentagon has achieved efficiencies in military healthcare.¹⁵⁶

DoD's budget execution process does many things well, and the department should sustain and nurture these successes. But . . . [it] needs important improvements.

However, roadblocks stand in the way of executing Pentagon budgets efficiently. Most notably, cost reduction is not fundamental to DOD's mission. Commanders know that they will be judged primarily on how well the planes fly or the tanks run, and not so much on whether they reorganize the motor pool to achieve savings. DoD managers also

face pressure to spend all their allotted funding lest their superiors, or Congress, feel that they do not really need the money and reduce their future budgets. DoD needs to make better use of cost data in order to identify areas where efficiencies can be obtained. Finally, Congress sometimes blocks DoD efficiency initiatives, as they have recently done with base closures, because they could lead to job losses. For all these reasons, the Pentagon struggles to execute budgets efficiently.

DoD's budget execution process does better in complying with laws and regulations. Financial managers monitor congressional limits on obligating authority closely, using financial systems designed for this task, and rarely exceed limits. DoD has a well-trained financial workforce, including training on the key aspects of the roughly 7,000 pages of DoD regulations that govern budget execution. Managers apply this knowledge to promote compliance. One indication of success is that ADA violations—the “felonies” in budget execution—amount to only a few cents in every \$100 of budget dollars executed by DoD financial managers, despite the complexity of DoD's budgets. However, DoD does need to achieve auditable statements to comply with current law and congressional direction.

¹⁵⁶ Hale, *Financing the Fight*, 27.

The budget execution process does well at meeting national security goals, arguably the most important of the three goals. An informal survey of 10 former senior military commanders suggests that DoD financial managers effectively help meet national security needs, largely because an experienced and capable financial workforce finds ways to get around process problems. The author's experience suggests the same. But Congress needs to allow more flexibility in executing budgets, especially for high-tech projects that must be financially nimble to take advantage of changing technologies.

In sum, DoD's budget execution process does many things well, and the department should sustain and nurture these successes. But, as has been discussed throughout this paper, DoD's budget execution process needs important improvements. The text box displayed earlier in this section of the paper summarizes the author's recommendations for change.

Perhaps most important, DoD needs to continue to focus on budget execution processes, even though they are complex and sometimes arcane. Budget execution processes must be strong in order to ensure that DoD meets its national security goals.

About the Author

The Honorable Robert F. Hale is currently a senior adviser at the Center for Strategic and International Studies. From 2009 to 2014 he served as undersecretary of defense (comptroller) and chief financial officer for the Department of Defense. From 1994 to 2001, he was the assistant secretary (financial management and comptroller) of the Air Force. He headed the defense analysis group at the Congressional Budget Office from 1980 to 1994. Early in his career, he served as a Navy officer, first on active duty and then in the reserves. Today, he is a senior executive advisor at Booz Allen Hamilton. Hale has received numerous senior-level awards for his federal service and is a Certified Defense Financial Manager (Level 3) and a Certified Defense Financial Manager (CDFM) with acquisition specialty.

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